MANAGEMENT DEVELOPMENT AND SUCCESSION IN

THE ELECTRICITY INDUSTRY 1948 - 1998:

EXECUTIVE MEN AND NON-EXECUTIVE WOMEN

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Abstract

This thesis investigates the development and succession of British Electricity Industry executives (top managers) during the half-century from 1948, and examines the reasons why few female employees became senior managers, and none became board members. In response to the continuing need for professional engineers, the industry operated a policy of internal promotion in parallel with systematic procedures for recruiting, training, developing and promoting employees and managers. The shortage of technical trainees resulted in the recruitment of apprentices with qualifications below the required standard; together with talented manual workers who were also perceived as potential engineers. Training facilities and career development opportunities were biased in favour of technical employees whose occupations were horizontally and vertically segregated. The term 'manager' was strictly limited to an elite of 1 in 100 employees, distinguished from the 1000s of supervisors (1 in 14 employees). The career trajectory to management was multifaceted until a standard was introduced in 1968. The federal nature of the industry resulted in inequalities with particular biases in training and selection to attend business schools. Managers who attended the Administrative Staff College at Henley were more successful in achieving promotion, especially to the level of chairmen, when compared with managers who attended an internal course. Using questionnaire results the thesis highlights differences between managers and top managers in relation to their personal characteristics, career development (including motivation and managing), and techniques for management selection and succession. The impact of privatisation on career development is also considered. An analysis of management succession over five decades shows that early entry to the industry was correlated with success; the long tenure of the first entrants hindered subsequent succession except for the most mobile. Like the industry's leaders, membership of decision-making committees which influenced female development was also male dominated. This belied the fact that females formed one in ten of non-executive board members. There is a substantial literature on the historical problems of women in work, their concentration in low-paid, low-status posts, employability and exclusion from higher graded posts. The electricity industry is a case in point. In electricity the focus was on boys and young men to fill the horizontally segregated technical training posts at a time when females were actively encouraged to follow a 'feminine' curriculum in schools. In addition, workshop and practical training facilities for females were non-existent in an industry which, unsurprisingly, perceived they would find its workplaces 'unattractive'. Females were concentrated in lower grade clerical work and in the bottom grades of the higher graded administrative structure. Due to the federal nature of the industry the finding that females were discriminated against remained unresolved. Privatisation did nothing to improve the gender imbalance in managerial opportunity. Some females now perform manual jobs previously confined to men, and two women became executive board members. However, by 1998, despite the more widespread use of the term 'manager' a number of electricity companies had still not appointed any senior female managers.

Table of Contents

List of Tables

Abbreviations

BIM	British Institute of Management
EI or ESI	Electricity Industry; Electricity Supply Industry
ESI (E&W)	Electricity Supply Industry (England and Wales)
ESI (GB)	Electricity Supply Industry (Great Britain)
ESITB	Electricity Supply Industry Training Board
ESITC	Electricity Supply Industry Training Committee
ETE	Education, Training and Efficiency Committee
MFP	Ministry of Fuel and Power
MWTS	Manual Worker Traineeship Scheme
NEDO	National Economic Development Office
NJB	National Joint Board [engineers]
NJC	National Joint Council [clerical and administrative staff]
NJAC	National Joint Advisory Council
NJCC(GB)	National Joint Co-ordinating Council for the Electricity Supply Industry in Great Britain
NJIC	National Joint Industrial Council [manual/industrial staff]
NJMC	National Joint and Higher Managerial Committee [managers]
PAG	Professional and Administrative Grade

Electricity organisations: before/after Privatisation

BEA	British Electricity Authority
CEA	Central Electricity Authority
CEGB/	Central Electricity Generating Board/
NP/PG/NG/BE	National Power/PowerGen/National Grid/British Energy
EC	Electricity Council
EEB/EE	Eastern Electricity Board/Eastern Electricity
EMEB/EME	East Midlands Electricity Board/ East Midlands Electricity
LEB/LE	London Electricity Board/London Electricity
Manweb	Merseyside and North Wales Electricity Board/ Manweb
MEB	Midlands Electricity Board/Midlands Electricity
NEEB/NE	North Eastern Electricity Board/Northern Electric
NORWEB	North Western Electricity Board/NORWEB
NSHEB/SHE	North of Scotland Hydro-Electric Board/Scottish Hydro-Electric
SEB/SE	Southern Electricity Board/Southern Electric
SEEB/SEEBOARD	Southern Eastern Electricity Board/ SEEBOARD
SSEB/SP	South of Scotland Electricity Board/ScottishPower
SWaEB/SWALEC	South Wales Electricity Board/South Wales Electricity
SWEB	South Western Electricity Board/ South Western Electricity
YEB/YEG	Yorkshire Electricity Board/Yorkshire Electricity Group

Acknowledgements

Introduction

Effective organisations and industries are dependent on the people who run them. It is for the leaders to ensure that the managers and the workforce are trained and developed to enable them to attain the required organisational standards. Similarly, it is for the leaders to ensure that systematic procedures and plans are in place for their succession, for the recruitment, selection and development of managers.

This thesis examines the origins, development and succession of managers to top posts in the nationalised electricity industry (ESI) and investigates the fact that none of those who reached the most senior management posts during the period of nationalisation were women. The aims of the research are (i) to investigate the ways in which individuals in the electricity industry reached managerial positions; (ii) to investigate the attitudes of managers to their training and development experiences, management succession plans and the future of the electricity industry; (iii) to produce a profile of the common characteristics of top managers (for definition see p.18) in the electricity industry; (iv) to investigate why women did not achieve succession to the top posts in the electricity industry during nationalisation; and (v) to establish whether women achieved senior executive status in electricity companies following privatisation.

In this study the route to top management begins with recruitment into the nationalised electricity industry as a trainee, or apprentice, followed by the acquisition of skills, knowledge and qualifications which should enhance progress

to a managerial position. Once established in a managerial post individuals acquire a portfolio or a track record of achievement and other factors that improve their chances of becoming a senior executive or full-time board member (see p.18). This traditional managerial career route and its gender imbalance are examined in this thesis in three Parts. Part 1 is concerned with female employment and the origins of electricity industry managers. Chapter 1 examines the main problems experienced by women in employment and their career progression. The next two chapters focus on the electricity industry and its desperate search for technical trainees. Chapter 2 analyses recruitment practices and problems. Chapter 3 examines employee training, development and career progression. Part 2 is concerned with the development and progression of ESI managers. Chapter 4 examines the industry's attitude to management development and analyses its use and sponsorship of business schools. Chapter 5 considers the effect of management courses on career progression by comparing two groups of managers who attended either the Administrative Staff College at Henley, or the industry's own internal Senior Management Course. Chapter 6 concerns evaluation and is divided into two sections. The first section focuses on attempts by the ESI to evaluate management training. The second section analyses the findings of a survey undertaken for this thesis immediately before privatisation, on the attitudes of top and lower ranking managers to their training, development, succession and the future of the ESI. Part 3 examines the characteristics of top management and whether there was exclusion of women during the management stage that restricted their access to executive positions. Chapter 7 analyses and compares the ESI leadership portfolio from 1948 to 1991. Chapter 8 investigates the role of

part-time board members (see p.19) and analyses the gender and characteristics of board members. Chapter 9 investigates the employment, recruitment and development of females in the ESI. Chapter 10 analyses the career progression of female employees during the period of nationalisation and discusses whether the privatisation of the electricity industry helped, hindered or made no difference to the promotion of women to top management positions in the electricity industry.

Before commencing with Chapter 1, however, it is necessary to describe briefly the structure of the electricity industry and its component organisations that are named in the text, and to define some of the terms that are used.

<u>Definitions</u>

The expressions that are defined are classified into two categories which explain the structure in terms of (a) the electricity industry and its management, and (b) a brief outline of the 1970s Equal Opportunities legislation. These descriptions derive in the main from the concise accounts produced by the electricity industry, and the Department for Education and Employment, which are duly acknowledged in this section.

(a)   The Structure of the Electricity Industry and its Management

Structure of the ESI

Over the forty-year period from 1948 to 1988, the structure of the Electricity Supply Industry changed as a result of two Acts of Parliament within its first ten years. The Electricity Act of 1947 brought the supply of England and Wales and

Scotland under public ownership with effect from 1st April 1948. A British

Electricity Authority (BEA or Central Electricity Authority, CEA) and fourteen

Area Boards were established, twelve in England and Wales and two in Scotland.

A fifteenth board, the North of Scotland Hydro-Electric Board (NSHEB) had been

in existence since 1943. These organisations were responsible for the statutory

generation and distribution of electricity in Great Britain.[1] The second major

structural change was determined by the Electricity Act, 1957. It should be noted

that this act was based largely on the recommendations of the Herbert Committee

report of January 1956.[2] With effect from the first of January 1958 the Central

Authority was replaced by two new statutory bodies, the Electricity Council and

the Central Electricity Generating Board (CEGB).[3] The Electricity Council was a

central organisation, a forum where the industry's general policy was decided. It

prepared a corporate plan for the whole industry and was a primary channel for

communication with Government, Parliament, and other nationalised industries and

outside organisations. The CEGB took over the duties of generation and

transmission from the CEA. The CEGB owned, operated and undertook new

investment in the power stations and national grid system,[4] which transmitted

electricity in bulk to the twelve Area Boards in England and Wales. The Act gave

them a greater financial responsibility[5] and a larger measure of autonomy.[6] A third

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[1] Electrical Times, *Electricity Supply Handbook* (2nd ed. September 1948), p.3.

[2] Sir Edwin Herbert (Chairman), *Report of the Committee of Inquiry into the Electricity Supply Industry* (Herbert Report), (January 1956), Cmd. 9672.

[3] Electricity Council, *Electricity Supply in the United Kingdom. A Chronology - From the beginnings of the industry to 31 December 1985* (4th ed. March 1987), p.73, and EC, *Electricity Supply in Great Britain. Organisation and Development, 31 March 1975*, (2nd ed. September 1975), p.2.

[4] R. Cochrane, *Power to the People. The Story of the National Grid* (1985).

[5] EC, *Electricity Supply. A Chronology* (1987), p.73.

[6] EC, *Electricity Supply. Organisation and Development* (1975), p.2.

piece of legislation, the Electricity Act 1989, which came into force on 31 March 1990, established the framework for privatisation. The twelve Area Electricity Boards (AEBs) in England and Wales were given partial independence (the Government held a 'golden share' until 1995) and were floated on the stock market in December 1990. They became known as the Regional Electricity Companies or RECs. The RECs continued to undertake their core activities, the supply and distribution of electricity, but within a relatively short time some of them began a process of diversification, take-over and merger. The CEGB and the Electricity Council were abolished. The CEGB's generation activities were divided among three companies, National Power (NP) and PowerGen (PG), which were floated without the nuclear operations (the first part in 1991 and the remainder in 1995), and Nuclear Electric, which remained in public ownership. The CEGB's transmission activities were transferred to a newly formed organisation called The National Grid Company (NGC). In 1955, the two southern Scottish Boards had been reorganised into one company, the South of Scotland Electricity Board (SSEB) and this company, along with the NSHEB became independent when they were floated in 1991. They were sold as ScottishPower (SP) and Scottish Hydro-Electric (SHE), respectively. The nuclear operations remained in public ownership with Scottish Nuclear. The British nuclear operating companies were floated on the stock exchange in 1996 under the name of British Energy. From 1995, following the complete independence of National Power, PowerGen and the RECs, the industry became the target for purchase by overseas, private sector, other utility and ESI purchasers. By the year 2000, none of the twelve RECs that had been floated in 1991 existed in the same form. ScottishPower operated in Scotland

but was an enlarged company as a result of acquiring Manweb and Southern Water and it had extending its activities into the American market. Scottish Hydro-Electric and Southern Electric had merged to become Scottish and Southern Energy. National Power, PowerGen and National Grid remained in operation but also as larger companies as a result of take-over activity or diversification.[7]

Management structure

This summary of the management structure relates to (i) the twelve AEBs, (ii) the CEGB, (iii) the Electricity Council and (iv) the Scottish Boards. The management description for each of these sub-sections is followed by a brief explanation of the distinction between the Full-time (or Whole-time), and Part-Time (or Non-Executive) Board Members. Clarification of the terms 'top managers' and 'managers' in the ESI follows this outline in sub-sections (v) and (vi).

(i)   The twelve Area Electricity Boards

Membership of each of the twelve Area Boards consisted of a chairman, a deputy chairman and from four to six other members, all appointed by the Secretary of State for Energy, and the chairman of the Electricity Consultative Council for the area. Any of the members could have been part-time but it was the practice to appoint each chairman and deputy chairman on a full-time basis. The pattern of organisation that developed in each board eventually comprised a two-tier management structure. The organisation below headquarters was divided into a

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[7] Electricity Association, 'Electricity companies in the United Kingdom - a brief chronology' (July 1999), Business Information Centre, Information Sheet 4, Electricity Association archives.

number of 'Areas', 'Districts' or 'Groups', whose Area or District Managers reported directly to Board Headquarters.[8]

(ii)   The Central Electricity Generating Board (CEGB)

Membership of the CEGB comprised a Chairman, Deputy Chairman, four full-time Members and up to four part-time Members, appointed by the Secretary of State. The Board's territory was divided into five geographical regions in England and Wales, each of which was headed by a Director-General. Below the level of Directors-General there were Directors responsible for generation, transmission and planning; and departmental heads concerned with the service functions of finance, personnel, secretarial and scientific services. In addition there were two divisions headed by Directors-General: one for Generation Development and Construction and the other for Transmission Development and Construction. The seven Directors-General were responsible to the Board.[9]

(iii)   The Electricity Council

Membership of the Electricity Council comprised six independent or Central Members, including the Chairman and two Deputy Chairmen of the Council, the twelve Area Board Chairmen and three nominated Members of the CEGB, one of whom had to be the Board's chairman.[10]

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[8] EC, *Electricity Supply. Organisation and Development* (975), pp.4-5.
[9] Ibid., pp.10-11.
[10] Ibid., p.21.

(iv)   The two Scottish Boards

The NSHEB consisted of a Chairman and from four to eight members, one of whom was the Deputy Chairman. All were part-time except for the Deputy Chairman who was also the General Manager. The appointments were made by the Secretary of State for Scotland to whom the Board was answerable. The board's organisation comprised five functional headquarters Departments headed by a Chief Engineer, Secretary, Chief Financial Officer, Chief Commercial Officer and Chief Personnel Officer, operating through Hydro and Thermal Generating Groups, Distribution Areas and Districts.[11] Membership of the SSEB comprised a Chairman and Deputy Chairman and seven part-time members, including the Chairman of the NSHEB, and the Chairman of the Electricity Consultative Council. The Board was accountable to the Secretary of State for Scotland who appointed the members of the Board.[12]

(v)   Top managers in the electricity industry

The description 'top manager' has been used by such committees of inquiry as the Herbert Report and by the MMC but they did not define the expression. The use of the term 'top manager', in this work, in the context of the electricity industry refers to the full-time management in the most senior posts in the electricity industry. They were known as 'Full-Time', or 'Whole-time Members', who sat on, for example, an Area Electricity Board (usually the chairman and deputy chairman). The remaining members of the top management team were known as

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[11] Ibid., p.31.
[12] Ibid., p.33.

'Chief Officers' (usually a Chief Engineer, a Chief Accountant, Chief Commercial Officer and a Secretary), who were not normally board members. Privatisation of the electricity industry introduced, among other things, changes to the titles of top managers mostly from chief officers to directors.

'Part-Time Members' were usually non-executive board members whose involvement was restricted to attendance at the monthly board meetings. There were three types of part-time board, or non-executive, members: (1) those who were not employed by the ESI; (2) those who were employed as full-time board members in their own board but sat in a part-time, non-executive, capacity on another board (especially on the Scottish Boards and on the Electricity Council); and (3) full-time employees who were appointed as part-time board members in their employing organisations. In 1985 the Department of Energy clarified the distinction between part-time and non-executive members. The Department circulated a copy of the guidelines that had been prepared for non-executive members and pointed out in the accompanying letter that reference throughout the guidelines referred to "non-executive" rather than "part-time" members because the term "non-executive" 'expresses the status of such members more accurately'.[13] According to the Institute of Directors:

> There is no legal definition of a non-executive director. The nearest approach is para 3, Schedule 3, Banking Act 1987: "directors without executive responsibility for the management of the bank's business" - in other words a director who plays no part in a company's operational management and is not an employee of the company. (Directors, as such, are not employees, but officers

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[13] On 23 April 1985, the Department of Energy (A. Goodlad) sent to the Electricity Council Chairman (T. P. Jones) a copy of the guidelines that the Department had prepared for non-executive members, EC archive.

of the company who owe their position to the requirements of the Companies Act 1985.[14]

The terms 'Part-time Members' and 'Non-Executive Directors' are used interchangeably in this thesis.

(vi)   Managers in the electricity industry

During the period of nationalisation, the term 'manager' in the electricity industry related to a strictly regulated number of posts that were registered with the industry's National Joint Managerial and Higher Executive Grades Committee (NJMC). In 1952 there was one manager to every 138 employees, that is managers made up less than one per cent of the England and Wales workforce. There were, thus, relatively few managers but thousands of supervisors (see chapter 4(c) for a discussion of this point). In addition to the NJMC there existed three other main bodies that dealt with the grading of technical and non-technical posts. The technical group comprised the engineers who were covered by the National Joint Board (NJB) and the industrial, or manual, posts that were governed by the National Joint Industrial Council (NJIC). The National Joint Council (NJC) covered the non-technical posts, and distinguished between the higher graded Professional and Administrative Graded (PAG) posts and the lower graded clerical posts.

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[14] Institute of Directors, *The Non-Executive Director* (October 1988), Guide to Boardroom Practice No. 12, p.4.

(b)   Equal Opportunities Legislation

Chapter 1 refers to the introduction of legislation that became effective in the 1970s, which entitled women to equal opportunities with men in employment. The following extracts that outline the changes introduced by the Equal Pay Act 1970 and the Sex Discrimination Act 1975, are taken from a brochure published by the Department for Education and Employment.[15]

The Equal Pay Act 1970

The purpose of the Equal Pay Act is to eliminate discrimination between women and men in the same employment in pay and other terms and conditions of their contracts of employment such as piecework, output and bonus payments, holidays and sick leave. However, since the introduction of the Act, European Community law has extended significantly the concept of pay to include redundancy payments, travel concessions, employers' pension contributions and occupational pension benefits as well.

The Sex Discrimination Act 1975

The Sex Discrimination Act 1975 makes it generally unlawful for an employer to treat a woman, on the ground of her sex, less favourably than the employer treats or would treat a man, in respect of access to jobs and all non-contractual benefits of employment.

The Sex Discrimination Act 1975 also makes it unlawful for an employer to treat a married person, on the ground of being married, less favourably than a single person of the same sex is, or would be treated. In addition, it

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[15] Department for Education and Employment, *Equal Pay. A guide to the Equal Pay Act*, PL 743 (Rev 2), p.3 and p.17.

makes indirect discrimination unlawful. Indirect discrimination is defined as the application of a requirement or condition with which considerably fewer women than men (or considerably fewer married than single people) can comply, and which cannot be shown to be justifiable.

Note on Archival References

During the early stages of research for this thesis, the historical records examined were held at the Electricity Council in the library or in the registry (archives). Privatisation of the electricity industry included the abolition of the Electricity Council at 30 Millbank, London SW1P 4RD and the formation of a trade association, the Electricity Association, which is located on the same site and inherited the Electricity Council's archives and library. References in the text are made to the Electricity Council because the research was undertaken during the existence of that body.

PART 1. THE ORIGINS OF ELECTRICITY INDUSTRY MANAGERS

Most of the nationalised industries, including fuel, power and transport, were created during the period 1945-1951. They were the 'network industries' that provided essential services to industries, businesses and households.[1] They made a significant contribution to the economy, providing about one-tenth (11%) of the UK gross domestic product and employing one in thirteen (7.7%) of those in employment in 1960.[2] The people who were appointed to manage these industries were given little direction by the government. During the period before 1961 the nationalised industries were given little guidance on pricing or investment. However, they were told that revenues should cover costs,[3] and given direction as to the particular services they had to supply. For example, electricity boards were told to meet all demands for electricity placed on them. The 1961 White Paper[4] required them to break even but they were not advised how to attain this objective; guidance on pricing policy was non-existent, while control and appraisal of capital investment were inadequate.[5] This was the type of environment in which the management of the nationalised industries operated. Each industry had its own problems, too, with the service that it was required to provide. The management of the electricity industry faced a period of expansion with the demand for electricity increasing from a growing number of customers. The industry was large in terms of capital and labour, forming some eight per cent of UK investment and less than one per cent of the

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[1] J. Foreman-Peck and R. Millward, *Public and Private Ownership of British Industry 1820-1990* (1994), p.340.

[2] National Economic Development Office (NEDO), *A study of UK nationalised industries. Their Role in the Economy and Control in the Future* (1976), Appendix volume, p.12.

[3] *The Financial and Economic Obligations of the Nationalised Industries* (1961), Cmnd. 1337, p.4.

[4] Ibid.

[5] G. L. Reid, and K. Allen, *Nationalized Industries* (1975), pp.17-19.

national workforce.[6] The industry faced problems of forecasting and planning for additional plant, for additional finances, and for manpower with a variety of skills. It also provided an essential service that relied on the existence and preservation of good industrial relations.[7] The industry had difficulty in obtaining sufficient engineers and it gave priority to the introduction of training programmes to overcome this problem. There was a continuing need to replace managers who vacated their positions due to promotion, illness or retirement but only a limited number of managers existed. They, too, had to be recruited. But managers did not exist as an occupation; they usually emerged through promotion from a particular function within the industry. The origin of these managers began from the time that they were recruited into the ESI and through the process of training, development and promotion they achieved the status and responsibilities of managers. This part is thus concerned with the origins of ESI managers. It examines the recruitment, training and career progression of individuals who subsequently joined a pool of people with similar development experiences from which managers were selected. None of those who became top managers were women during the period under investigation, 1948-1998. In order to provide an appreciation and context for the study of managers in the electricity industry, the first chapter examines the employment of women generally and their career progression. The two remaining chapters in Part 1 focus on the electricity industry, Chapter 2 is concerned with recruitment and Chapter 3 examines training, development and progression.

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[6] L. Hannah, *Engineers, Managers and Politicians. The First Fifteen Years of Nationalised Electricity Supply in Britain* (1982), p.123.
[7] Ibid., p.123.

Chapter 1. Women and Work

In 1971 the electricity industry employed nineteen hundred managers. Only five of them were female. Before privatisation, the number of female managers had risen to ten. This chapter explores the key issues that hindered and thus prevented, except for a small minority, the accession of women to top management positions in the British economy. The chapter is divided into two sections. Section (a) examines the historical context of women's work, and section (b) investigates the problems facing women in the labour market. Although the employment of women in the electricity industry is fully examined in Part 3 of the thesis, where applicable, similarities and comparisons are discussed briefly below and linked to the relevant chapters.

(a)   Women's entry to the male preserve of paid employment

In order to understand the exclusion of women from top management positions it is necessary to explore briefly their introduction to work in a historical context. Historically, women have been engaged in paid employment for centuries but the nature of their work changed from that in pre-industrial cottage industries, agricultural and other work to post-industrial work in factories as a cheap source of labour. In the second half of the nineteenth century, most women were employed in domestic service and by the beginning of the twentieth century women were concentrated, and over-represented in a few low-paid industries and domestic service. They had also begun to work in offices.[8]

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[8] Deidre Beddoe, *Discovering Women's History. A practical guide to the sources of women's history, 1840-1945* (1993), pp.108-113.

The equal opportunities legislation of the 1970s[9] is an indicator of the former unequal status of women. Indeed, one hundred years before the equality legislation was introduced, women had few rights and their circumstances were generally determined by legislators, employers, trade unions and, if married, their husbands. The Victorian period established the virtues of the 'idle lady'.[10] It was a period in which most women expected and were expected to marry. To be 'left on the shelf' and remain a spinster was regarded as a social failure.[11] For middle class women it was also regarded as 'a failure to do business',[12] yet marriage stripped a woman of her property and independence. The doctrine of *couveture*, which entitled her husband to the legal ownership of her property on marriage, was not rescinded until 1935.[13] It was not until 1928 that women who were over 21 were enfranchised.[14]

In the Victorian period there were clear distinctions between working class and middle class women. Working class women tended to work from economic necessity whereas middle class women who wanted to work were restricted to undertaking charitable work in the voluntary sector. It was the Victorian ideal that women were in the protection of their husbands and it was therefore unnecessary for them to work unless that work involved their normal domestic activities. Some middle-class wives claimed, successfully, that charitable work could be seen as a part of their domestic work so that it became an acceptable role for them to undertake.[15]

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[9] Summarised in the Introduction.

[10] G. M. Trevelyan, *Illustrated English Social History: 4* (1968), pp.49-56.

[11] Jane Lewis, *Women in England 1870-1950* (1984), p.77. See also Hannah Gavron, *The Captive Wife. Conflicts of Housebound Mothers* (1983 ed.), p.7.

[12] Lewis, *Women in England* (1984), p.3.

[13] Ibid., pp.119-121.

[14] Gavron, *Captive Wife* (1983), p.11. See also April Carter, *The Politics of Women's Rights* (1988), p.39.

[15] Lewis, *Women in England* (1984), p.76.

In fact, early in the twentieth-century, the issue of women and paid work appears to have been governed by protectionism, exclusion and reinforcement. Men were able to protect their jobs and exclude women from them by deploying a variety of plausible subterfuges. The exclusion of women from semi-skilled and skilled jobs, and professional occupations, combined with the view of the 'proper role of women', 'shared beliefs regarding women's capacities',[16] deliberate exclusion from craft[17] and other trade unions,[18] and the perception of what was deemed to be 'suitable work for women',[19] are just some examples of beliefs and cultural factors that ensured women remained in jobs with low pay and status.

The boundaries that existed for working women had been created within an all-powerful, male-dominated national and local environment. In retrospect it appears that there was an implicit alliance of male workers, husbands, employers, trade unions and legislators to restrict the role of women at work, often by manipulating working practices to the benefit of the male worker and to the detriment of women. Because of the ways in which men protected their jobs, to the exclusion of women, it was not possible for women to advance to skilled or higher professional work. Lewis provides examples of male workers colluding with employers to exclude females. In one instance, in the mid-nineteenth century, male employees sub-contracted work and paid for it themselves. At the beginning of the twentieth century, in 1901,

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[16] Ibid., pp.180-200.
[17] Juliet Webster, *Shaping Women's Work. Gender, Employment and Information Technology* (1996), p.24.
[18] Ross Davies, *Women and Work* (1975), pp.53-65.
[19] Lewis, *Women in England* (1984), pp.172-3.

skilled workers, too, were able to regulate the entry of semi-skilled workers by imposing conditions that excluded women.[20]

The sexual division of labour apparent from the separation of home and factory with industrialisation was maintained and reinforced with women remaining in the lowest paid, unskilled posts. In the mid-nineteenth century, there is an example of men becoming spinners while women undertook less skilled tasks.[21] In the late nineteenth and early twentieth centuries, pay differentials between men and women were prevalent[22] and reinforced in collusion with employers. For example, they put women on piece-work, as opposed to the male time rate, or ensured that a male worker was needed to help a female worker which entitled him to a higher rate, or just set a 'notional woman's rate'. Most trade unions, especially the craft unions, continued to oppose the employment of women and only agreed to their entry to the workforce during the two World Wars on the condition that they would leave on the cessation of wartime activities. However, attitudes became more relaxed and 'the Second World War did not see a repeat of the bitter struggle against women dilutees that characterised the First World War'.[23] In such non-manual jobs as teaching and in shops and offices, pay for women was also set at rates that were lower than men's. Few women (3%) were members of the 'higher' professions and, although they received similar rates of pay as their male counterparts, their earnings were much less. Between 1918 and 1932, in the Civil Service, women did well in their

[20] Ibid., pp.176-181.
[21] R. Fitzgerald, *British Labour Management & Industrial Welfare 1846-1939* (1988), p.10.
[22] Ibid., p.18.
[23] Lewis, *Women in England* (1984), pp.164-184. See also Davies, *Women and Work* (1975), pp.151-4; and Gavron, *Captive Wife* (1966), pp.32-3; and Carter, *Women's Rights* (1988), pp.46-8.

examinations for promotion to the executive posts but 'tended to fail in disproportionate numbers at the interview stage'.[24]

The impact of technological advances influenced women's roles at work and at home but resulted in the reinforcement of sexual divisions of labour. With the introduction of automatic machines, men continued to ensure that women were excluded from skilled jobs. Women moved into non-manual, white blouse, segregated jobs operating typewriters and telegraphs at lower rates of pay than men who were quite separate from them but who took the higher paid jobs such as office manager and supervised their work output.[25] Table 1 analyses the distribution of occupation by gender together with the shift from manual into non-manual work.[26]

Table 1

Distribution of economically active population (GB) 1911 and 1971

Occupational category	1911 Male %	1911 Female %	1971 Male %	1971 Female %
Self-employed and higher grade salaried professionals	1.5	1.0	6.1	1.4
Employers and proprietors	7.7	4.3	5.2	2.9
Administrators and managers	3.9	2.3	9.9	3.3
Lower-grade salaried professionals and technicians	1.4	5.8	5.5	10.8
Inspectors, supervisors and foremen	1.8	0.2	4.5	1.2
Clerical workers	5.1	3.3	6.1	28.0
Sales personnel & shop assistants [includes supervisors]	5.0	6.4	3.9	9.4
Skilled manual workers	33.0	24.6	29.4	9.3
Semi-skilled manual workers	29.1	47.0	21.2	27.3
Unskilled manual workers	11.5	5.1	8.2	6.4
Total active population (000s)	**12,926**	**5,424**	**15,609**	**8,762**

Source: A. H. Halsey, *Change in British Society* (1978), pp.26-27, Table 2.1.

It can be seen from Table 1 that in both 1911 and 1971 females formed a higher

[24] Lewis, *Women in England* (1984), pp.165-196. See also Davies, *Women and Work* (1975), pp.155-9; and Carter, *Women's Rights* (1988), p.84.
[25] Lewis, *Women in England* (1984), pp.180-197.
[26] A. H. Halsey, *Change in British Society* (1978), pp.26-27, Table 2.1.

proportion than males in manual semi-skilled, sales and lower-grade professional occupations. The Table also illustrates the rise in the proportion of women in clerical occupations. Whereas in 1911 females formed just three per cent of clerical workers, this proportion had risen to 28 per cent in 1971, compared with the relatively small proportion of male clerical workers (5% and 6% respectively).

The second part of this chapter analyses the key issues that have influenced the employment of women.

(b)   Problems facing women in the labour market

The problems, or obstacles, facing women once they entered the labour force are discussed in three parts, comprising (i) the employability of women, (ii) preparation for paid employment, and (iii) women in the labour market.

(i)   The employability of women

This section concerns two main characteristics that have influenced the employment of women. The first concerns the 'marriage bar'. The second relates to the growth of women's employment in the labour market, which reflects the impact of part-time employment.

Women's participation in the workforce increased during the twentieth century from one-third (32%) of all women in 1921 to over a half (51%) in 1987. The main change was in the proportion of married women who became economically active. Some six in ten single women (61%) were economically active in 1921 and 1981,

compared with less than one in ten (9%) married women in 1921, just under half

(47%) of this group in 1981, and over half (55%) in 1987. Among divorced or

widowed women the proportion remained fairly constant at around one-fifth of this

group (26% in 1921 and 23% in 1981).[27] One of the main reasons for increased

participation by married women during the early twentieth century was due to the

abolition of the 'marriage bar'.[28]

The Marriage Bar

The marriage bar was a ban that prohibited married women working. Although

Hakim contends that this was 'a legally enforceable rule',[29] the ban reflected social

attitudes and became an institutionalised practice. Following the First World War

the government dismissed women from munitions factories and from the Civil

Service. The Restoration of Pre-War Practices Act restored 'men's jobs' to men.[30] It

will be recalled that women lost their independence on marriage and their right to

retain their earnings, which became their husband's, until the Married Women's

Property Act 1921.[31] The Sex Disqualification (Removal) Act of 1919, which stated

that neither sex nor marriage should disqualify anyone from appointments or

professions proved to be meaningless. Attempts to invoke it by the use of test cases

against the unfair dismissal of women teachers failed. In the 1920s, Public Health

Authorities sacked women doctors and nurses, and Local Authorities required

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[27] Jane Lewis and David Piachaud, *Women and poverty in the twentieth century*, p.37, in Caroline Glendinning and Jane Millar (Editors), 'Women and Poverty in Britain in the 1990s' (1992).
[28] Catherine Hakim, *Key Issues in Women's Work. Female heterogeneity and the polarisation of women's employment* (1996), pp.123-5.
[29] Ibid., p.124.
[30] Beddoe, *Discovering Women's History* (1993), pp.115-116.
[31] Davies, *Women and Work* (1975), p.49.

women to sign contracts that they would resign on marriage.[32] In the Civil Service

the marriage bar operated, making 'resignation on marriage obligatory',[33] and in

1912, in Rowntree, there was a view that married women should be 'at home tending

their domestic duties and children'.[34] Working class girls who had climbed the social

ladder by entering clerical occupations also experienced the marriage bar.[35]

Although the marriage bar was abolished following the Second World War it had

been effective in excluding women from the workplace[36] and in perpetuating the

widely held view that a woman's place was in the home. The marriage bar had also

been used to advantage by the alliance of government, employers, trade unions and

husbands during each of the World Wars when married women and mothers had

been encouraged to return to work to replace male workers. In order to facilitate

their re-entry to work, special agreements had been made with trade unions to allow

women to work only during the course of the war so that the women would not

threaten their members' jobs. Day nurseries that were opened to cater for their

children were closed on the cessation of wartime activities and women returned to

their homes. It is believed that the marriage bar was instrumental in lowering the

expectations of young women about their future role in paid employment so that they

were 'discouraged from investing in qualifications and careers'.[37]

Following the Second World War, a combination of factors such as the end of the

marriage bar, the introduction of domestic electrical appliances, birth control and,

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[32] Carol Dyhouse, *Feminism and the Family in England 1880-1939* (1989), pp.79-80.
[33] Lewis, *Women in England* (1984), p.197.
[34] Robert Fitzgerald, *Rowntree and the Marketing Revolution, 1862-1969* (1995), p.238.
[35] Elizabeth Roberts, *Women's Work 1840-1940* (1988), p.38.
[36] Fitzgerald, *Rowntree* (1995), pp.405-409.
[37] Hakim, *Key Issues* (1996), p.125.

among other things, the desire by women for leisure, accompanied the greater participation of women in the workforce. In the late 1950s, a study asked married women if they would take a job outside the home, the findings revealed a preference for part-time work. It was found that of those who wanted to work (47%) the majority opted for part-time (40%) rather than full-time (4%) work or just a job (3%).[38] Although the participation of married women in the labour force increased considerably during the post-war period, their status and role in the workforce did not undergo a commensurate increase. The reasons for this are related to the next key characteristic of twentieth century women's employment, part-time work, which it will be shown is synonymous with low status work. However, before this part of the investigation begins, it is necessary to describe briefly the existence and formation of female employees in the electricity industry (ESI).

It will be shown in Chapter 9 that in 1951 females represented 12 per cent of all employees in the ESI and this proportion rose to 19 per cent in 1980. In 1985, of the 26,000 females employed in the ESI in England and Wales, some 5,775 (22%) worked part-time in lower graded clerical (68%) or manual (32%) occupations. Most of the clerical group (3,910) worked in retail sales (78%) or clerical (22%) occupations. In the context of the review that follows, it should also be noted that the ESI part-time females had given long service. One-third (33%) of them had been employed for 10 years or more. This meant that they had commenced their ESI employment at least ten years before the introduction of the equal opportunities legislation, an issue that is also explored below.

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[38] Viola Klein, *Britain's Married Women Workers* (1965), p.45.

Part-time work

Part-time work was defined, following the post-war period, as 'work for not more than 30 hours per week, excluding main meal-breaks and overtime'. Full-time work on the other hand was defined as a standard of 40 hours a week.[39] In the forty-year period, 1951-1991, the number of females in employment grew by almost two-thirds from 6.8 million to 11 million, but the number in full-time employment remained stable at around six million. The growth was due entirely to the number of females in part-time work, which increased from three-quarters of a million (11% of females in part-time employment) in 1951, to 4.8 million (44%) in 1991 and 5 million (44%) in 1995. Few men feature in the part-time employment statistics and their equivalent data range from 0.5 per cent in 1951 to six per cent in 1991 and eight per cent in 1995. The greatest increase in females working part-time followed the abolition of the marriage bar.[40] The increases in females working part-time during the 1950s (11%) and 1960s (25%) are due to such factors as more relaxed social attitudes to women working, a greater propensity by women themselves to work for longer periods with short breaks for child-bearing and child-rearing and the shortage of labour at this time.[41]

The reasons for women working are admitted to be complex as is the effect on the employment of women working part-time, including the assertions that employers created part-time jobs, and the contention that 'the most striking characteristics of

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[39] Olive Robinson, *The changing labour market: growth of part-time employment and labour market segmentation in Britain*, p.118, in Sylvia Walby (ed.), 'Gender Segregation at Work' (1988).
[40] Hakim, *Key Issues* (1996), p.64.
[41] Jane Lewis, *Women in Britain since 1945. Women, Family, Work and the State in the Post-War Years* (1992), pp.74-76.

women's paid jobs have remained low pay and low status'.[42] This is illustrated by their concentration in clerical and secretarial (21%), personal services (20%) and sales (18%) work, compared with managerial (5%) and professional (5%) occupations.[43] It has been observed, too, that 'there is a tendency for women to move into less favoured sectors of employment like part-time work following childbirth',[44] and that 're-entry into part-time employment was also very often associated with occupational downgrading (most commonly women who had had some kind of white-collar job returning to low-level service work)'.[45] Recent evidence shows that the decision to return to work is often determined by a woman's age and the age of her youngest dependent child. Ten years ago some 71 per cent of women of working age were economically active, compared with 88 per cent of men, but less than half (48%) of mothers with a pre-school age child were economically active, and only 12 per cent were in full-time jobs.[46] There is also evidence which reveals that relatively few women (24 per cent of those working full-time and only 7 per cent of those working part-time) see themselves as having a career. If financially dependent, the preference to stop full-time work was determined by age rather than childcare. Female part-timers were the least interested in promotion and invested less interest in their work; they were also found to be more committed to their families (92%) and marriages (72%) than female full-time employees (83% and 52% respectively).[47] Thus, 'market work remains secondary to and contingent on a

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[42] Lewis, *Women in Britain* (1992), pp.74-78.
[43] Hakim, *Key Issues* (1996), p.69, Table 3.6.
[44] Jacqueline Bates Gaston, *The female reproductive system and work*, p.69, in Jenny Firth-Cozens and Michael A. West (eds.), 'Women at Work. Psychological and organizational perspectives' (1991).
[45] Rosemary Crompton, *Women and Work in Modern Britain* (1997), p.32.
[46] Susan Lonsdale, *Patterns of paid work*, p.98, in Glendinning and Millar, 'Women and Poverty' (1992).
[47] Hakim, *Key Issues* (1996), pp.107-9.

primary responsibility for home and family'. It has also been acknowledged that despite the permanence of most part-time jobs there is a link between discontinuous employment patterns and part-time work. As a result of intermittent employment, women hold shorter job tenures and accumulate less total work experience than men, with consequential effects on their earnings differentials and promotion 'up the career ladders'. These factors 'contribute to women's lower representation in higher grade posts'.[48]

Lonsdale argues that in seeking to reduce costs, companies are more likely to restructure their workforce. They replace full-time workers with cheaper part-time workers leaving a 'core or primary sector of stable and well-paid jobs alongside a peripheral or secondary sector, which is characterised by low wages, poor working conditions and job instability' and includes women and older workers.[49] However, one group of women said that they did not want to work full-time.[50] Crompton reports that satisfaction with part-time work was to be distinguished from the job they liked the best, and expectations that employment prospects would improve as a result of their qualifications:

> *more than half of the part-timers also said that their qualifications might lead them to expect a better job than the one they had, as compared to only a third of the full-timers who thought this.*[51]

A study carried out some thirty years ago made an interesting point about those who opted for part-time work. It argued that the expression was a misnomer because the

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[48] Ibid., pp.135-140.
[49] Lonsdale, *Paid work*, p.103, in Glendinning and Millar, 'Women and Poverty' (1992).
[50] Crompton, *Women and Work* (1997), pp.34-35.
[51] Ibid., p.35.

difference between the hours worked by full-time and part-time employees was often very small. The real reason that the women elected to work part-time was because they were unable to commit themselves to unlimited overtime, even though they were not working less than the normal weekly hours.[52]

Employers saw part-timers as cheap to employ not only because they were relatively low paid[53] but also because of their reduced employment protection rights, making them easier to hire and fire, and they did not have to pay National Insurance contributions until earnings reached a certain level. Potential entitlements that were denied to part-time employees, but were given to full-time employees, included pension rights, insurance, sick pay, holiday entitlement,[54] maternity benefits and redundancy payments.[55] It will be seen from Chapter 9 that in the ESI, at least one-third of part-time females were employed before the introduction of employment protection legislation and would have been excluded from training and benefits.

The 1975 Employment Protection Act gave some protection to those working at least 16 hours a week, or those who worked eight hours but with five years continuous service.[56] This ensured that those employees who had been excluded from these benefits, were no longer excluded. Hakim, however, refers to two national surveys which found that:

> *the statutory right to retain one's job was not a significant determinant of a woman's return to work soon after the birth* [of a child].[57]

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[52] Michael Fogarty, A. J. Allen, Isobel Allen, Patricia Walters, *Women in Top Jobs. Four Studies in Achievement* (1971), p.72.
[53] Ibid., p.120 and p.128.
[54] Crompton, *Women and Work* (1997), pp.33-34.
[55] Robinson, *Changing labour market*, p.129, in Walby, 'Gender Segregation' (1988).
[56] Lonsdale, *Paid work*, pp.104-105, in Glendinning and Millar, 'Women and Poverty' (1992).
[57] Hakim, *Key Issues* (1996), pp.126-127.

Many women in the 1950s who had left work on the birth of their first child, did not

return for several years, whereas in the 1980s many women returned within a year

and between births.[58] In a survey that compared the differences between British and

American Women at work, it was found that:

> *British women in clerical, skilled or semi-skilled factory work before childbirth have
> less chance of recovering their status than American women, if they lost it at their
> first return to work.*
>
> *American women have far more upward mobility than British women in nearly all
> cases although the differences are particularly marked at the lower occupational
> levels.*[59]

The differences were explained by two facts, that more British women were in part-

time jobs than American women who spent less time out of work for child-rearing

than British women.[60]

It has been shown that the marriage bar was responsible for restricting the

employment of women. Its abolition saw the growth of women in part-time

employment who, along with female full-time employees, anticipated improved jobs

and careers as a result of their qualifications. The issue of credentials and the

perception that they raised employment expectations are the next subjects for

exploration. It will be shown that although women were late starters in gaining

educational qualifications, outmoded traditional attitudes continued to hinder their

progress.

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[58] Ibid.
[59] Shirley Dex and Lois B. Shaw, *British and American Women at Work. Do Equal Opportunities Policies Matter?* (1986), pp.94-98.
[60] Ibid.

(ii)   Preparation for paid employment

During the First and Second World Wars, married women were persuaded to return to work on condition that they returned to their domestic activities afterwards. Prior to their marriage they had no career expectations, no career prospects and they were not encouraged to do otherwise than pursue their domestic work at home.[61] When education became more widely available with the 1944 Education Act, expectations that girls' roles were domestically inclined continued to be perpetuated with the reservation of domestic subjects for girls.[62] Thus, as a result of static attitudes at the time, schoolboys, too, who would grow into the girls' future colleagues and potential managers, were imbued with the concept, that a woman's role was in home-making.[63] A concept that started at home,[64] was conditioned in elementary school with a 'feminine curriculum'[65] that included cookery and dressmaking for girls and simple woodwork for boys, and led to a gender imbalance in subjects studied at secondary school. Girls were thus more likely to study the science of biology but less likely than boys to study physics and chemistry.[66] As a consequence, girls were excluded from apprenticeship schemes because they did not have the mathematics or science qualifications that were required for engineering or science based occupations.[67] By the 1970s only two in ten girls, compared with five in ten boys, specialised in science subjects:

> whereas on the arts side, the percentages were practically reversed. This suggests that many girls voluntarily cut themselves off from careers in industry. It also

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[61] Michael Roper, *Masculinity and the British Organization Man since 1945* (1994), p.193.
[62] Lewis, *Women in Britain* (1992), p.87.
[63] Carter, *Women's Rights* (1988), p.38.
[64] Lindsay Mackie & Polly Pattullo, *Women at Work* (1977), p.30.
[65] Ann Wickham, *Women and Training* (1986), pp.18-21.
[66] Mackie & Pattullo, *Women at Work* (1977), p.28. See also Carter, *Women's Rights* (1988), p.36 and p.81.
[67] Wickham, *Women and Training* (1986), p.4.

suggests that in many cases they cut themselves off from a university training as well.[68]

In Chapter 9 (b) it will be shown that the ESI's gender-biased recruitment literature appears to have been aimed solely at boys and men, and that male dominated job advertisements were not unique to the ESI. In a 1964 report on the attitudes of Grammar School girls to science-based careers, girls who were taking Advanced level subjects in physics and pure and applied mathematics, gave their reasons for not undertaking a career in engineering. The girls saw engineering as a man's job in which they would compete with boys who subsequently secured all the best jobs. They believed that it was either hard for girls to get training, or there was none available for them. These female students had noticed that advertisements for jobs in the engineering field referred to men and this perception applied also to those advertisements that were not gender specific:[69]

> *Engineering, particularly, was unpopular as a career. Dislike of it was based on a bias against industry, on a belief that there was a great deal of prejudice against girls, and on considerable ignorance of the range of work covered by the term.*[70]

In parallel with the perception that recruitment literature was gender specific, it has been noted elsewhere that the professions did not advertise in girls' schools and that where they did advertise, the references and pictures were of men.[71] Interestingly, under the eleven-plus system, because girls were likely to do proportionately better than boys at gaining entry to grammar schools, measures were taken to ensure that boys were not outnumbered. It has been reported that:

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[68] Davies, *Women and Work* (1975), p.107.
[69] Nancy Seear, Veronica Roberts, John Brock, *A Career for Women in Industry* (1964), pp.32-34.
[70] Ibid., p.44.
[71] Davies, *Women and Work* (1975), p.136.

some county councils deliberately equalised the number of boys going into grammar schools by giving them 'handicap' grades.[72]

This may be the reason for the observation that:

it was easier for a boy to get a grammar school place than a girl, and easier for boys too to get apprenticeships and other kinds of training.[73]

From 1962 to 1972 girls had achieved higher pass rates than boys in their GCE '0' and 'A' level examinations[74] and by the mid-1980s, while both sexes were achieving increased levels of passes, the rate for girls had increased more sharply.[75] Indeed, some twenty years' later girls had established that they were superior to boys in passing their school examinations and 'confirmed their growing supremacy over boys at GCSE'.[76] However, in response to the news that:

for the first time in the 49-year history of A levels, girls had gained a higher proportion of the top three grades than boys [77]

the Government authorised research into ways of raising boys' educational standards.[78]

By the 1980s, although girls had made considerable progress with their educational achievements, these accomplishments were unlikely to impress some employers whose recruitment and training procedures were based on past custom and practice.

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[72] Carter, *Women's Rights* (1988), p.37.
[73] Jane Miller, *School for Women* (1996), p.134. See also David Charter, Education Correspondent, *The Times* (16 August 2000) 'Work ethic puts girls top of the class', p.7.
[74] Mackie & Pattullo, *Women at Work* (1977), p.29.
[75] Gillian Pascall, *Women in professional careers: social policy developments*, p.22, in Julia Evetts (ed.), 'Women and Career: Themes and issues in advanced industrial societies' (1994).
[76] David Charter, Education Correspondent, *The Times* (16 August 2000), 'Girl-power triumphs over laddish culture at A level', p.1.
[77] Robin Young, 'Pledge to bring boys up to girls' standard', *The Times* (18 August 2000), p.11.
[78] Ibid.

In 1984, from a survey of some 308 business organisations it was found that despite a shortage of skilled men, the organisations did not contemplate training women, and they held traditional views that harked back some thirty years:

> few were even beginning to think of women as potential skilled workers and managers.

> many had absolutely no intention of 'wasting' their training capacity on too many females, however bright and well qualified. [79]

Indeed, in the late 1950s and early 1960s, the government had assumed that girls would not need training because they would marry and any investment in their training would be lost.[80] This view was shared by the accountancy and other professions including company secretaryship, personnel and office management.[81] The TUC also held this position. As late as 1973 it stated that the majority of places on courses for the engineering and construction industries at Government Training Centres were 'clearly appropriate only for men'.[82]

More recently, decisions about future careers made by school-leavers are often made by following the advice and guidance given by parents, teachers and career officers. The presence of a role model in the family, such as a father in engineering, is seen as having an important influence on whether females decide to enter this field.[83] However, the class divisions that exist within gendered groups will be a major determinant of the career routes for working class and middle class girls, so that

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[79] Ken Roberts, Deborah Richardson and Sally Dench, *Sex discrimination in youth labour markets and employers' interests*, pp.102-108, in Walby, 'Gender Segregation' (1988).
[80] Wickham, *Women and Training* (1986), pp.20-3.
[81] Davies, *Women and Work* (1975), pp.135-6.
[82] Wickham, *Women and Training* (1986), p.25.
[83] Ibid., p.87.

many of the former group will be trained to be low paid women.[84] This view holds that there is sex segregation within the training market and that these girls are expected to undertake vocational training in occupations such as the clerical and service sectors that are similar to the caring type of domestic service work undertaken by their forebears. The girls have been impressed with the glamorous images of these service occupations before they entered the sectors that will train them in clerical, retail, hairdressing and personal services. In reality, it is argued, these jobs offer them the image of glamour combined with low pay in full-time employment while they are young, but as part-time female adult workers they will have become downwardly mobile and trapped in poor work. Work will have been restructured around the needs of both full-time and part-time female workers, often in situations where their contribution presents vast savings to companies. For example where one word processor now does the work previously done by up to five typists.[85] Certainly, the electricity industry could not be classified as 'glamorous'. Indeed, it is shown in Chapter 2 that, following nationalisation, its poor image was believed to be instrumental in deterring recruits. The glamorous industries were seen to be in the private sector, such as electronics, which were considered attractive to potential engineering recruits. However, glamour was, presumably, not an option as far as part-time workers were concerned. It will be recalled that in the ESI, some of the female part-time workers had long service in such low-grade occupations as catering, sales and clerical work.

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[84] Carol Buswell, *Training girls to be low-paid women*, pp.80-81, in Glendinning and Millar, 'Women and Poverty' (1992).
[85] Ibid., pp.80-94.

When women attempted to enter non-traditional vocational occupations in the United States, they encountered resistance and opposition from employers, trade unions and male colleagues, even when they received state encouragement. During the 1970s and 1980s, affirmative action in the United States successfully placed women in traditionally male blue-collar jobs and apprenticeships. But companies and trade unions were opposed to the measures and encouraged opposition at workplace level.[86] While some men believed women would not be up to the job it was also perceived that men tended to work in ways that demonstrated their courage and toughness. These 'gendered traits', that often resulted in unsafe ways of working, were an assertion of working-class male styles that they continually exploited to distinguish them from tradeswomen.[87] In the electricity industry few females became apprentices, and those who did were usually in catering occupations. Traditional male jobs, such as meter reading, were not undertaken by females until privatisation.

In further education, too, courses were perceived to be 'male' or 'female' courses. Statistics show the proportion of female students rose from 41 per cent of UK full-time students in 1970/1 to 48 per cent in 1989/90,[88] and they appeared to be linking their selection of subjects in higher education with occupational choice. Females formed almost half (48%) of full-time first degree students in business and financial studies and in medicine and dentistry (46%), and a quarter (25%) in architecture. Engineering and technology remained predominantly male preserves (12%), while

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[86] Kath Weston, *Production as Means, Production as Metaphor: Women's Struggle to Enter the Trades*, p.140, in Faye Ginsburg and Anna Lowenhaupt Tsing (eds.), 'Uncertain Terms. Negotiating Gender in American Culture' (1990).
[87] Ibid., pp.144-8.
[88] Pascall, *Women in professional careers*, p.22, in Evetts, 'Women and Career' (1994).

females tended to dominate education (79%), allied medicine (72%), and languages (72%).[89] During the late 1970s and early 1980s, women graduates began to enter professional occupations where they had been only nominally represented before, although they 'remained a small percentage of the total membership of all but a few professional bodies'.[90] Those who attained higher level qualifications, however, formed a small proportion of the labour market.[91] Their participation in clerical, sales and catering occupations declined in the 1980s but they were still over-represented in these occupations at the beginning of the 1990s.[92] Similarly, during this period, women achieved an increased presence in professional and management occupations[93] but they continued to be under-represented in these occupations. This type of under-representation is a feature of females employed in the ESI, and is discussed in Chapter 10.

It would appear that women were adding to their 'human capital', that is, their skills, qualifications and labour market experience,[94] in preparation for their future employment careers. The attainment of qualifications was just one pre-requisite for any female with career ambitions. However, unless they were professionally qualified career women, they were likely to follow the pattern of other women's employment that has been characterised by jobs in female segregated occupations that are persistently low paid and of low status. These characteristics, explored below, are indicative of the majority of females who remain in lower positions while

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[89] Ibid., p.23.
[90] Carter, *Women's Rights* (1988), p.83.
[91] Sylvia Walby, *Segregation in employment in social and economic theory*, p.16, in Walby, 'Gender Segregation' (1988).
[92] Ibid., p.45, Table 2.1.
[93] Ibid., pp.45-46.
[94] Walby, *Segregation in employment*, p.15, in Walby, 'Gender Segregation' (1988).

their male counterparts move onwards and upwards in pay and promotion, a characteristic, shown in Chapter 10, that is also representative of females employed by the ESI.

(iii)   Women in the labour market

This section distinguishes between segmentation of the labour market and occupational segregation.   Both models are helpful tools that illustrate women's position both in the labour market and in the ESI.   The section concludes with a discussion on earnings differentials.

Market segmentation

This description of the labour market distinguishes between the different conditions of employment, career patterns and rewards that are earned by full-time and part-time employees.   In this model the labour market is divided into four market segments that are classified into primary internal, primary external, secondary internal and secondary external market sectors.   Full-time employees are located in the primary sectors.   They are permanent employees, with career ladders, firm specific skills and long-term stable earnings.   They differ from part-time secondary sector workers who may be in permanent, temporary or casual type jobs, and whom employers perceive to have little interest in training or careers. [95]

While segmentation is a useful tool for explaining the different market sectors and the conditions of employment that are associated with each labour market sector, it is

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[95] Hakim, *Key Issues* (1996), pp.147-8.

to be distinguished from occupational segregation, the sexual division of labour, which helps to define and to explain the position of women in the occupational labour force. Both of the descriptive types of occupational segregation deftly illustrate the divisions that existed in the electricity industry.

Female segregated occupations

Horizontal and vertical job segregation describe the two main occupational characteristics. Horizontal segregation exists where men and women tend to be clustered so that men work with men and women with women.[96] However, they do different kinds of work and are not in competition for the same jobs. Examples include female dressmakers, male tailors, female cooks and male carpenters.[97] Vertical segregation, considered to be the most important, reflects a male-dominated occupational hierarchy, that

> exists when men dominate the higher grade and higher paid occupations and jobs, or when men are promoted further up career ladders within occupations - for example, where men are heads of schools while women are teachers.[98]

One of the key reasons given for the importance of job segregation concerns the development of separate wage structures for men and women that resulted in low wages for women.[99] Or, as applied in the electricity industry, when men dominated managerial posts and were responsible for recruitment and career progression; and/or dominated committees that influenced female development and employment. These issues are discussed in Chapter 10.

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[96] Cynthia Cockburn, *The gendering of jobs: workplace relations and the reproduction of sex segregation*, p.29, in Walby, 'Gender Segregation' (1988).
[97] Hakim, *Key Issues* (1996), pp.145-149.
[98] Ibid., p.149.
[99] Lonsdale, *Paid Work*, pp.97-98, in Glendinning and Millar, 'Women and Poverty' (1992).

Some seventy years before the equal opportunities legislation, the proportion of women working in horizontally-segregated occupations changed only marginally from 1901 (88%) to 1951 (86%) and 1971 (84%). By 1980 almost two-thirds (63%) of women worked in jobs done only by women, compared with eight in ten (80%) men who were in jobs dominated by men.[100] By 1991, a half of all employment for women was concentrated in just four low-paid and low-status occupations, which were mainly in the 'caring' occupations, domestic jobs, unskilled manual and lower-level clerical work, and in the lower professions.[101] In America, too, occupational sex segregation has been described as 'one of the most enduring features of the US labor market', with men over-represented in managerial and craft occupations and the majority of women working in service and clerical jobs, nursing and teaching.[102] Like their British counterparts, American women made numerical gains in feminising occupations but still found themselves in low paid, low status work.[103]

Technological change enabled women to move into some of the jobs that had previously been performed by men, this deskilling of an occupation by its feminisation, meant that, 'men are often able to move sideways into somewhat differently classified jobs, re-establishing sexual segregation'.[104] An example of this concerns the feminisation of clerical work. The proportion of female clerks increased by sixty percentage points over the seventy year period from 1911 (18%) to 1981 (78%). As the numbers of females increased, men not only moved into new

[100] Lewis, *Women in Britain* 1992, p.81.
[101] Crompton, *Women and Work* (1997), pp.44-5.
[102] Barbara F. Reskin and Patricia A. Roos, *Job Queues, Gender Queues. Explaining Women's Inroads into Male Occupations* (1990), pp.4-5.
[103] Lewis, *Women in Britain* 1992, p.25.
[104] Ibid., p.86.

white collar jobs in accounting, sales and office management but men who were recruited as clerks found access to ladders of promotion, so that the 'male career path was preserved at the expense of women'.[105] Another example concerns the 'golden pathway' constructed in the National Health Service:

> whereby male workers were informally given the information and encouragement necessary to seek advancement and women were not.[106]

The 1970s sex discrimination legislation is believed by Hakim to have had 'a dramatic and immediate impact in lowering the overall level of occupational segregation', for a while at least, and 'more important, the marked long-term increase in vertical segregation in both white collar and manual occupations was dramatically reversed after 1971'.[107] Trends show that between 1979 and 1990, women's representation in major occupational groups improved. There was a small decline in the groups where women had been over-represented, such as clerical, sales and catering work. Where they had been under-represented in management and professional groups there had been an increase, albeit a comparatively marginal increase. They were barely visible in senior posts in engineering professions or in the expanding new computing professions,[108] which also became male dominated.[109] Women's share of top jobs, during the same period, 'increased sharply after 1971', although it was noted that managing directors and chief executives were 'men almost without exception'.[110] In management the proportion of women managers increased more in the financial services, retail and catering industries and in companies in staff

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[105] Ibid., p.86. See also Reskin and Roos, *Gender Queues* (1990), pp.11-12.
[106] Lewis, *Women in Britain*, 1992, pp.86-87.
[107] Hakim, *Key Issues* (1996), p.153.
[108] Ibid., pp.154-156.
[109] Webster, *Shaping Women's Work* (1996), pp.36-9.
[110] Hakim, *Key Issues* (1996), p.155.

functions such as training, personnel and finance, but they continue to be under-represented in general management.[111] It has been observed that men and women tend to follow different career paths. Men tended to pursue generalist and women functional careers so that while men 'moved easily from technical posts into general management, women were more often promoted within one specialism',[112] with the implication that the reason for women managers not reaching senior management is because they follow narrowly defined careers. This observation is not one that can readily be applied to the electricity industry, mainly because there were too few women who were classified as engineers. However, it will be seen in Chapter 10 that women classified as engineers were likely to have been employed as chemists or in research or computing work. Chemists, whether male or female, generally remained in such posts, progressing to become the Head of that narrowly defined sphere. This was generally true of research workers in laboratories. Market research was, like computing, male dominated and vertically segregated. In addition, posts in the nationalised ESI followed a systematic progression. If women did not apply it may have been because they perceived their chances of success were nil, whereas men may have taken the view that this was their opportunity to meet, ingratiate and prove themselves before their male superiors. They could also show that they were interested in promotion, which would be noted for future determination of their career progression. The ESI publicised its need for boys and men, and emphasised the likelihood of their success but did not give any such encouragement to women employees.

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[111] Roper, *British Organization Man* (1994), p.34. See also Carter, *Shaping Women's Work* (1996), p.85.
[112] Roper, *British Organization Man* (1994), p.34.

While high levels of occupational sex segregation provide 'the major explanation for the persistence of women's low pay' in the workforce,[113] the impact of legislation on occupational segregation was also instrumental in effecting changes in earnings differentials between men and women in the labour market.

The 'Pay Gap' - Earnings Differentials

The difference between average female and male hourly earnings is known as the sex differential in earnings, or the 'pay gap'. Until the equal pay legislation became effective in the mid-1970s, women full-time workers typically earned around less than two-thirds of male earnings. Their earnings then increased to three-quarters (74%), where it remained for some ten years, and then rose incrementally to 80 per cent by 1995.[114] However, women in part-time jobs were seen to earn less per hour than those in full-time employment.[115] The reasons that women earned so much less than men concern on the one hand differences in education and work experience, which are thought to account for around one-third of the pay gap among full-time workers, while the rest is put down to unequal treatment of men and women who have the same education and work history.[116] Another view is that 'almost all the pay gap can be explained by women's failure to attain the higher grades within occupations' because men put in longer hours, accompanied by continuous employment and thus longer tenures, placing them in positions that lead to top jobs. However, this view also allows that up to one-third of the pay gap may be due to

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[113] Lewis, *Women in Britain* (1992), p.81.
[114] Hakim, *Key Issues* (1996), pp.174-175.
[115] Carter, *Women's Rights* (1988), pp.80-1.
[116] Angela Dale and Heather Joshi, *The Economic and Social Status of British Women* (1992), p.34 in Buttler [et al], 'Acta Demographica' (1992).

discrimination that excludes women from top jobs and earnings.[117] Other factors concern the type of jobs that women do and the segregation of women into lower paying occupations, and the concentration of females into part-time, lower paid jobs.[118] These factors, related to females employed in the ESI are investigated in Chapters 9 and 10 below.

It is also held that the opportunity cost of caring results in women's lost earnings when they take on a caring role. Their interrupted careers result in lost job experience, lost training, lost pay increments and lost promotion. Women often return to part-time work at a lower level than their former job, which enables them to work convenient hours. However, this is usually counterbalanced by downward mobility into manual and sales jobs and their own acceptance of lower pay because of the flexibility in their working arrangements. It is conceded that after a woman returns to full-time work and once again becomes familiar with the breadth of work experiences, some 'catching-up' is possible as time passes and the period taken for the career-break diminishes.[119] This observation, however, does not describe the context of the environment in which the 'catching up' is done. A woman's return to work is not a continuation of the 'snapshot' situation in which she left. Colleagues will have changed, she will be older, she will have previous sub-ordinates and trainees as her equals, perhaps as her manager. She will be competing with perhaps, brighter, younger and more energetic and highly motivated employees who may not have conflicting home, domestic and, perhaps, evening study roles; but who may

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[117] Hakim, *Key Issues* (1996), p.186.

[118] Lonsdale, *Paid Work*, pp.107-8, in Glendinning and Millar, 'Women and Poverty' (1992).

[119] Heather Joshi, *The cost of caring*, pp.110-117, in Glendinning and Millar, 'Women and Poverty' (1992).

have been 'talent-spotted' and who are in the process of being groomed by a less than objective superior.

The findings from two independent studies of women in top jobs, separated by twenty years, provide examples of the problems women faced in climbing the career ladder. In one study,[120] published in 1971, the reasons for women's lack of progress in two companies were examined. The survey found that few women were recruited, few stayed after their late twenties, there were few female graduates and there were other factors operating that made it difficult for them to reach senior posts. Traditional attitudes held that if females had not done a job before then they were not able to do it; and that they were not career oriented because they did not think in terms of a career. Women sometimes found themselves in a hostile atmosphere or they were unable to prove their abilities because they were stuck in a backwater; or they did not want to leave the jobs they were in or their field. In some departments, however, it was found that females did well where they were allowed to do so but in other departments they were 'either not allowed in or are deliberately kept below a certain level'. There was also:

> evidence to show that ambition and aspiration perk up after a woman has had a family, only to collapse again when it is realised there are very few openings.[121]

Twenty years later, in 1992, in a study[122] of some 48 females who had successful careers, it was found that the majority of these successful women:

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[120] Michael Fogarty [et al], *Women in Top Jobs* (1971).
[121] Ibid., pp.58-73.
[122] Barbara White, Charles Cox and Cary Cooper, *Women's Career Development. A Study of High Flyers* (1992), p.6.

had specialised in traditional female educational domains, which may indicate that they anticipated the subsequent sex segregation of the labour market.[123]

Male managers were seen to be watchful of opportunities to progress up the executive ladder by company moves whereas women tended to hold themselves back and only moved when they were competent in their jobs. Although the main stimulus for a career move by the successful women was a blocked career path, they made 'out-spiralling' moves to achieve promotion which tended to defeat the notion of the existence of a 'glass ceiling' in their particular circumstances.[124]

While very few women have reached top management positions in organisations, the men who are in top management have been supported on their career path by dedicated and competent carers at home and in the office in the form of their wives and secretaries. This is another aspect of the issue of the opportunity costs for women and concerns the ways in which women's lives are restructured around their husband's work. It has been detected that some of the wives of successful businessmen continued to follow their own careers in order to provide financial support while their husbands studied, but when their husbands qualified their own careers became of secondary importance to their husband's career.[125] While the husband has no competition from his wife, it has been held that:

it is the office secretary's potential ability to replace her boss which necessitates the functional separation between managerial and secretarial streams. [126]

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[123] Ibid., p.215.
[124] Ibid., pp.133-135 and p.221.
[125] Roper, *British Organization Man* (1994), pp.172-4.
[126] Ibid., pp.180-181.

When questioned about the reasons for there being so few female managers in senior management, men tended to rely on the argument that people with continuous service were more likely to be promoted, which implicitly excluded women who took career breaks from competing with men for the top jobs.[127]

Summary

Until the end of the Second World War, middle class women had been restricted from entering the labour market as a result of the imposition of the marriage bar. The restriction was not rigidly applied to working class women who worked from economic necessity. Married women and mothers were persuaded to return to the labour market during wartime activities, and daytime nurseries were opened to facilitate their return. However, a condition that had been agreed with trade unions was that they would return to their domestic activities on the cessation of wartime activities. Government, employers, trade unions and husbands had been instrumental in their efforts to prevent women from entering the labour market. Although the 1944 Education Act ensured that all children attended school, girls attended classes in female oriented subjects, such as cooking and needlework while boys were taught woodwork and metalwork. Labour saving devices and other technological improvements had two main effects. On the domestic front, women benefited from time saving technological improvements. In the labour market, although technological improvements enabled women to perform work previously undertaken by men, the latter responded by using tactical devices that resulted in the deskilling of their former jobs and monetary enhancements, or the creation of new posts that led to improved careers.

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[127] Ibid., pp.172-200.

Following the end of the marriage bar women began to return to work but the increase in women's employment was made up of those who worked part-time. Before the equal opportunities legislation became effective in the 1970s, thousands of women who returned to work part-time found that they were not entitled to the same conditions of employment and benefits as their full-time colleagues, employers did not want to train them and they were not considered to be interested in careers. While a large number of women did not want to pursue a career, many did and even full-time female employees found that higher positions were denied to them. Following the 1970s legislation, there were immediate changes in the labour market as occupations that had been male or female dominated started to decline in their composition. Females continued to work in low status and low paid occupations but they had made some inroads into senior management positions and the professions. However, when it came to the top management positions, the captains of industry, women were almost non-existent, and remain excluded. Businessmen relied on the competencies of their wives and secretaries to take care of them in their home and office environments. However, they were capable of employing plausible and often invisible subterfuges to ensure that they, in alliance with their fellow men, remain in overall control of such practices as promotion and access to top posts.

The fact that in schools and universities women have been attempting to achieve higher qualifications is indicative of their desire to pursue careers in the labour market. Career breaks for child-rearing purposes have been dismissed as being too small a period to affect women's careers. However, any such breaks in continuous employment leave women behind when they return to work because of the need to

update training, qualifications and knowledge of improvements to technology. Apart from the loss of annual incremental salaries and company pension contributions.

This chapter examined the nature of the problems that faced women in their gradual entry to paid employment and their incremental achievements in education and the professions; and their failure, through systematic tactical processes of exclusion, to attain the top management posts. In Part 3 of the investigation that follows, it will become apparent that women employed in the ESI shared the same problems and obstacles experienced by their female counterparts, described in the above examination.

The remaining two chapters in Part 1 focus on the electricity industry, on the source of its potential managers through its procedures for recruitment, development and career progression.

Chapter 2.   Entry to Employment in the Electricity Industry

This chapter examines recruitment practices in the electricity industry and the apparent barriers to entry that may have deterred potential applicants. These barriers concerned educational qualifications and age. The employment of females in the electricity industry is dealt with separately in Chapter 9 below but it is important to bear in mind the context of women's employability around the time that the electricity industry was nationalised. It will be recalled from Chapter 1 that in 1951 only a third (35%) of all women were economically active; young women had few expectations of a future role in paid employment and were discouraged from investing in qualifications and careers; few married women were in paid employment; and some one in ten women (11%) were in part-time employment. Women were late starters in gaining educational qualifications due to their lack of educational opportunity and social attitudes. During the 1950s and 1960s, however, although attitudes to women working became more relaxed, a woman's role was seen to be in home making. At school girls followed subjects that were domestically oriented rather than the sciences and, as a result, were limited in their choice of a career. For example, they lacked the qualifications required for entry to technical apprenticeships in the ESI. It should also be borne in mind that in 1951 some 86 per cent of women were employed in horizontally segregated occupations. This means that they worked in jobs done only by women and were doing different kinds of work from men, so that they were not in competition with men for the same jobs.

The chapter begins by examining the main activities in which people were employed, and the growth of the industry between 1948 and 1978. This is followed by an

account of the industry's manpower requirements and the sources from which people were recruited.

Main Activities and Growth

Before 1961, the main duty of the electricity industry was to provide a supply of electricity to the community as cheaply as possible.[1] The type of staff employed in the industry's main activities of generation, transmission and distribution of electricity represented a range of professions and skills in technical or non-technical work areas. These included electrical, mechanical and civil engineers; craftsmen; architects, surveyors, draughtsmen; secretaries, accountants, lawyers, administrators, clerical workers and many others that were needed to carry out the range of activities analysed in Table 1.

Table 1

Allocation of salaries and related costs 1955/56

Activity	£M.	%
Generation	26.0	30
Distribution	20.0	23
Contracting and sales of appliances	10.3	12
Consumer service	10.3	12
Administration and general expenses	9.1	10
Meter reading, billing & collection of accounts	7.2	8
Training, safety and welfare	3.1	4
Transmission	1.4	2
Research	0.2	*
Total	**87.6**	**100%**

Note: * means the proportion is less than 0.5 per cent.
Source: EC, *Handbook of Electricity Supply Statistics, 1984* (1984), p.59, Table 33.

Demand for electricity grew rapidly following nationalisation. In England and Wales, during the period 1948-1958, the transmission system grew by over eighty per cent; the amount of electricity generated more than doubled; and the number of

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[1] The Electricity Act, 1947, Section 1(1).

customers increased by one-fifth. Similar increases occurred during the succeeding

ten years. In the seventies, however, the rate of growth slowed down. The earlier

expansion in the transmission system, units generated and number of customers, was

reflected in the growth in the number of employees, from some 151,000[2] in 1948[3] to

around 221,000[4] in 1968.[5] Table 2 analyses the four main areas of growth at ten-year

intervals. The columns on the far right of the table show the percentage point

increase in each of these key areas from 1948 through to 1968. In the period 1968-

1978 growth slowed as a result of efficient systems and the near saturation point of

electricity customers. Units generated continued to grow but at a slower pace. As a

result of technological advances and improvements in labour productivity,

employment decreased by over 60,000 employees in England and Wales.[6]

Table 2

Growth in the Electricity Industry in England and Wales
with ± percentage point change in each period

	Unit	1948 No.	1958 No.	1968 No.	1978 No.	Change 1948 to 1958 ±%	1958 to 1968 ±%	1968 to 1978 ±%
Transmission system, mains in service	km	8372	15156	28768	14487	81	90	-50
Units generated	GWh	38665	86613	175705	288140	124	103	64
Employment (England and Wales)	000s	147	183	229	161	24	25	-30
Number of customers	000s	10801	14867	17821	20002	38	20	12

Source: EC, *Handbook of Electricity Supply Statistics, 1985*, pp.14, 20, 102-103, 60.

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[2] Employed by the British Electricity Authority, the 14 Area Electricity Boards and the North of Scotland Board. Ministry of Fuel and Power (MFP), *Statistical Digest 1952* (1953), p.95.

[3] MFP, *Statistical Digest 1952* (1953), Table 87, p.108.

[4] Employees in England and Wales only. 1970 GB employment was 208,000, see Hannah, *Engineers, Managers and Politicians* (1982), p.294; for generation statistics see p.291; and for sales of electricity 1938-80 see p.292. Details of sales are also found in R. Kelf-Cohen, *Twenty years of Nationalisation. The British Experience* (1969), p.99.

[5] EC, *Handbook of Electricity Supply Statistics 1985*, pp.102-103.

[6] NEDO, *A study of UK nationalised industries. Their role in the economy and control in the future* (1976), pp.15-17.

Manpower Requirements

In 1948, the newly nationalised electricity industry acquired its skilled and experienced operational and administrative staff from the 560 municipal and company undertakings that previously supplied electricity. Each of the nationalised electricity boards was responsible for reviewing its own manpower needs and for predicting its future requirements. The general approach the boards adopted to ensure they had sufficient numbers of qualified staff was to recruit the majority of entrants from schools, colleges and universities and to train them. The emphasis on training was expected to serve two purposes: primarily to ensure efficiency of operations and, secondly, to attract people into the industry.[7] Additional sources of recruitment included existing staff within the industry, and external applicants who had been trained in other industries and possessed specialist knowledge. The new employees were recruited to undertake work of a technical or non-technical nature. Those classified within the technical group comprised manual/industrial workers and engineers. The non-technical group consisted of clerical workers and administrative staff.

The following investigation will show that as a result of the industry's poor image and low starting salaries compared with private industry, the electricity industry had difficulty in obtaining the numbers of recruits that it needed. It will also be shown that to ensure the recruitment of sufficient trainees, the educational qualifications required for entry to the industry were, in the majority of cases, waived. The chapter

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[7] E.W. Bussey, 'Electricity as a Public Enterprise: Recruitment and Training for the Electricity Supply Industry', in the British Electricity Authority (BEA) compendium of lectures bound in the unpublished brochure for the [First] British Electricity Summer School, at Magdalen College Oxford (1948), p.45, EC archive.

is divided into two sections that examine recruitment into the technical posts, and (b) recruitment into the non-technical posts. The sources of recruitment, the formal educational qualifications required and the qualifications achieved are examined in both sections.

(a)   Recruitment into the technical graded posts

Two main groups of employees performed technical work. The largest group was formed from manual workers, later renamed industrial staff. The second group consisted of qualified engineering staff. In order that the ESI had sufficient employees to fill the technical posts in the future, the industry aimed to recruit young people and existing employees to its formal training schemes. For young people there were three specific types of training available: craft apprenticeships, student apprenticeships or graduate training. By 31 March 1955, the electricity industry[8] employed over 7,000 technical trainees and apprentices, formed from 5,500 craft apprentices, 1,500 student apprentices and 250 graduate trainees.[9] Briefly, the crucial distinction between the technical trainees is that craft apprentices learnt a single trade and eventually became skilled industrial employees. While student apprentices and graduate trainees tended to specialise in generation and transmission or in distribution and joined the engineering staff. There were opportunities for both types of apprentice to progress. In the case of craft apprentices, for example, this applied, to those:

> *whose potential indicated that they were worthy of transfer to a type of training which would enable them to become engineers.*[10]

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[8] In England and Wales.

[9] Herbert Report (1956), pp. 42-43.

[10] ESITB, *Report and Statement of Accounts for the year ended 31st March 1971* (1971) HMSO, p.10.

The industry recognised its deficiency in securing sufficient technical staff to meet its estimated manpower requirements and decided to provide industrial employees with opportunities to progress with the help of training schemes to the technical grades. Existing industrial staff, whose age, or lack of qualifications, made them ineligible to apply for apprenticeships, were recruited on to the Manual Workers' Traineeship Scheme, which is discussed in the next section, along with craft apprenticeships.

(i)   Recruitment to industrial posts

The majority of craft apprentices were recruited when they left school before the age of 16 years so that following their five-year period of training they were indentured at the age of 21 years. They were recruited from all types of secondary schools. In 1953 most came from Secondary Modern Schools (66%), Grammar Schools (19%), Technical Schools (11%) or Technical Colleges (4%).[11] Many of them were 'premature leavers' or 'failed GCE'.[12] A few (3%) had been awarded the GCE in the industry's preferred subjects, which qualified them for transfer to student apprenticeship. Some (7%) possessed GCE's in other subjects and some (3%) held a School Certificate. However, the majority of those recruited (86%) had no qualifications.[13] It was suggested that those craft apprentices who did possess good academic qualifications were suppressing the numbers of student apprentices, which had implications for the future numbers of engineers.[14] Those with the necessary

[11] NJAC, ETE, 6.1.1954, Minutes, Fourth Meeting, Appendix I, Table III(b), EC archive.
[12] NJAC Report, 'Survey of Apprenticeship Training', 21.10.1954, Nineteenth Meeting, Appendix I, EC archive.
[13] Ibid., Appendix I, Table III.
[14] Ibid., Appendix I.

qualifications represented just three per cent of craft apprentices, or ten per cent of student apprentices:

> *there is some doubt whether craft apprentices should be recruited from boys with an academic background as evidenced by success in GCE.* [Unless] *they are being recruited with a view to ultimate transfer to student apprenticeship.* [15]

Craft apprentices were considered for transfer to student apprenticeship if they were successful in obtaining an Ordinary National Certificate. However, some electricity boards used their own criteria:

> *a number of boards lay down no specific educational requirement for such transfer and the decision is based on selection alone.* [16]

Recruitment from existing employees was effected through the Manual Workers' Traineeship Scheme (MWTS). This Scheme was conceived because the industry was unable to secure sufficient technical staff to match its manpower needs and was introduced to ensure the industry was thoroughly combed for manual workers who were capable of promotion to the technical staff.[17] The Scheme was aimed at industrial workers who had not had the opportunity to use their talents at work but had the ability to progress to the technical staff. The scheme had two aims: to ensure that manual workers received the necessary encouragement to study for technical qualifications, and to provide a ladder of promotion for manual workers that was parallel to the craft, student and graduate schemes. However, those who were over 35 years old were not to be encouraged:

> *Experience suggests that it will not normally be advisable to select men above the age of 35 for these awards, though this upper age limit need not be rigidly applied.*[18]

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[15] NJAC, (ETE), Minutes, 6.1.1954, p.5, paragraph 5(b), EC archive.
[16] NJAC Report, 'Apprenticeship Training', 21.10.1954. Appendix I, paragraph 3(c), EC archive.
[17] NJAC Report, 'Manual Worker Traineeship Scheme', 21.10.1954, Appendix II, p.30, EC archive.
[18] Ibid., p.30.

In 1956, some 174 applied to join the MWTS. Over half (54%) were granted release to take the ONC course. Some three in ten (30%) were granted release to study for the HNC, seven (4%) were able to study for the HND. Some were permitted to study other subjects (6%) and some (6%) had their applications refused. In 1957, some 209 applied to join the MWTS[19] but these formed a minute proportion of the manual employees. In order to put the applications into perspective, it should be noted that in 1956 the 174 MWTS applications formed just 0.15 per cent of the industrial workforce of 115,934.[20] Applications for 1957 formed 0.17 per cent of all manual workers. The Scheme had been widely adopted in all of the boards except the London Board but publicity may have been haphazard, resulting in a disappointing take-up:

> *Whilst the Scheme has been well publicised in most Area Boards and Divisions. It would appear that where it has not attracted attention more could be done by personal contact.* [21]

It is also surprising that the number of applications from manual workers to join the Scheme was not greater because it was felt that the day release manual workers were given for study continued to be generous throughout their training period, despite the initial failures of some of them:

> *Area Boards and Divisions have tended to be generous in granting part-time day release* [to manual worker trainees] *even to those who had obtained the minimum qualifications some years before. A significant proportion of those have failed at the first attempt.* [22]

In addition, union officials thought the manual workers were granted more

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[19] NJAC, (ETE) 91, 'Implementation of Manual Worker Traineeship Scheme', 5.3.1957, EC archive.
[20] EC, 'Electricity Supply Statistics 1948-49 to 1957-58', EC archive.
[21] NJAC, (ETE) 91, MWTS, 5.3.1957, EC archive.
[22] Ibid.

advantageous day release facilities than their members:

> *there was a feeling that manual workers now had an advantage over technical employees with regard to day release facilities. This arose mainly because the Manual Worker Traineeship Scheme provided for (a) part-time day release after S.II of the ONC and subject to satisfactory progress up to HNC level, and (b) day release on a selective basis for courses leading to professional qualifications, including sandwich courses. By no means all technical staff employed in the industry were fully qualified and it seemed to him* [Mr Palmer - trade union representative for the engineering employees] *that such people should have at least the same facilities as the manual workers. Mr Moser* [TU representative for the clerical and administrative staff] *said that the same position applied to clerical and administrative employees who were granted day release if over the age of 21, only at the discretion of the employing Board. .. During the ensuing discussion it was pointed out that schemes for part-time release for adult employees did exist under the Educational Incentive Scheme but that release was at the discretion of the employing Boards, and therefore practice varied between different Boards.* [23]

(ii)   Recruitment to engineering posts

The electricity generating divisions required between 300 and 500 engineers annually. While the majority of the new engineers were expected to be recruited from student apprentices and graduate trainees, the industry anticipated and experienced a continuing shortage of engineers. The main reasons for this shortage were attributed to the low regard with which the industry was viewed compared with the more glamorous private industries such as electronics; lack of publicity and the lack of a careers policy that emphasised career progression to the top management posts.[24] In Lord Herbert's view not only were the starting salaries of graduates too low but he believed that their careers should be handled preferentially and manipulated by top management:[25]

> *inflexibility of grading and inadequate incentives, may be less attractive to the more vigorous and imaginative of the young men of to-day than, say, the aircraft, chemical and electrical manufacturing industries.* [26]

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[23] NJAC, (ETE), 29.4.1958, Minutes 825 and 826, EC archive.

[24] NJAC, 17.4.1958, 27th Meeting, R.R.B. Brown commenting on the Current Problems of Area Boards, under the main subject heading 'The Organisation and Development of the Industry under the 1957 Act', p.12, EC archive.

[25] Herbert Report (1956), paras. 325 and 326.

[26] Ibid., para. 321.

Student apprentice school-leavers were recruited, around the age of 16, from grammar and technical schools. In 1953, student apprentices were recruited mostly from grammar schools (75%), the remainder were from technical schools (13%), technical colleges (7%) or secondary modern schools (4%). Less than one per cent were from university.[27] The recruits were expected to possess 4 GCE '0' levels, including English, mathematics, physics or general science and another approved subject.[28] However, qualifications were not a barrier to employment. The electricity industry was so desperate for engineers that the educational entry requirements were lowered, or waived, to enable the recruitment of far more entrants into the industry. In 1954 a third (34%) of student apprentices possessed the required entry qualifications but two-thirds (66%) of them did not. They held the School Certificate (28%), the GCE but not in the required subjects (19%), some had other qualifications (4%) and some did not have any (15%).[29]

Table 3

Educational Qualifications
Student Apprentices

Type of Qualification	No.	%	
Higher National Diploma (HND)	1	)	
Higher National Certificate (HNC)	2	)	
Eng. Cadet Diplomas	2	)	3%
Higher School Certificate	9	)	
GCE (Advanced)	6	)	
Ordinary National Certificate/Diploma (ONC/D)	33	5	
GCE with English, Mathematics, Science	163	26	
School Certificate	173	28	
GCE without above	117	19	
Matriculation	23	4	
Other unclassified qualifications	3	*	
No qualifications	92	15	
Total	**624**	**100%**	

* means the proportion is less than 0.5 per cent
Source: NJAC (ETE), 4th Meeting, 'Survey of Apprenticeship Training', 6.1.1954,
        Appendix I, Table IVb, EC archive.

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[27] NJAC (ETE), 6.1.1954, 4th Meeting, Table III(b), EC archive.

[28] NJAC, 'Principles of Recruitment and Selection of Apprentices', 21.10.1954, Appendix III, p.33, EC archive.

[29] NJAC (ETE), 'Survey of Apprenticeship Training', 6.1.1954, 4th Meeting, Appendix I, Table IVb, EC archive.

The period of training for student apprentices lasted between four and five years. The age limit that applied to the recruitment of craft apprentices was not applied as rigidly to student apprentices. Eighteen-year-olds and those who had completed their National Service were recruited provided that they had the requisite 'A' levels in mathematics and science or a diploma or another acceptable qualification. Student apprentices were expected to become engineers and to be remunerated on the engineers' pay scales when they qualified. However, during the period that they were under training and under the supervision of an industrial craftsman they, together with the craft apprentices, were paid according to the manual workers' pay scales.

Recruitment from existing employees to student apprenticeship was effected through the transfer of craft apprentices, when they had attained the Ordinary National Certificate.[30] By the time they had completed their training they were around 24 years of age. In 1960, some 78 craft apprentices transferred to student engineering apprenticeships, representing over a quarter (26%) of those recruited to this group of trainees.[31]

The Herbert Report made particular reference to the figures for recruitment and resignations under the Graduate Training Scheme.[32] In the first two years of the scheme the industry successfully recruited a high proportion of graduates but in the succeeding five years the numbers declined from 401 in 1950, to 93 recruited in 1955. The industry annually lost, through resignation, one graduate to every six

[30] NJAC, 'Survey of Apprenticeship Training', 21.10.1954, Appendix I, EC archive.
[31] EC, 'Annual Report on Education & Training in the Electricity Boards, 1.4.1959 to 31.3.1960, Statistical Tables', Table I, (EC archive.
[32] Herbert Report (1956), p.43.

recruited. The main reasons they left the industry were put down to competition for graduates from other industries; inadequate salaries, incentives and status; and poor opportunities to gain experience, to develop and progress.[33] In other words, it was difficult to attract graduates into the nationalised industries when the private sector offered more in the way of training, salaries and career progression. Although this was a period of intense competition for the recruitment of graduates into industry,[34] there was not wholehearted support for recruiting them. The attitude held by top management and the Electrical Power Engineers' Association (EPEA) respectively was that graduates became 'swollen headed' and they opposed special treatment for new graduate entrants.[35] In 1953 the ESI recruited graduates from two sources. The majority (83%) came from technical college and the remainder (17%) from university.[36] They were expected to hold an engineering degree or a Higher National Certificate (HNC). In 1954, over half (53%) held an HNC, a quarter (24%) held a degree, and the remainder (21%) held various diplomas.[37] Their training lasted for two years. The ESI continued to be unsuccessful in attracting graduates and the decline in their numbers persisted. The manpower budget for 1963 estimated that 72 graduate recruits were required but less than half that number (35) were recruited. At the same time, the ESI experienced problems in recruiting other types of technical trainees. For example, some 79 diploma trainees were required, but only 44 were recruited. There was also a shortfall in the numbers of student apprentices recruited

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[33] Ibid., pp.84-86.

[34] R. Kelf-Cohen, *Twenty Years of Nationalisation. The British Experience* (1969), p.112.

[35] Hannah, *Engineers, Managers and Politicians* (1982), pp.129-130. See also, Herbert Report (1956), pp.85-86. Herbert recorded that he was disturbed at the attitude of the Central Authority towards the advancement of graduate trainees, and their policy on the training of potential top managers.

[36] NJAC, ETE, 6.1.1954, 4th Meeting, Table III(a), EC archive.

[37] NJAC, 'Apprenticeship Training', 21.10.1954, Appendix I, Table I, EC archive.

but not to the same extent as the graduate or diploma trainees. The number of student apprentices recruited (631), was less than the number forecast (685). Conversely, there was no shortage of craft apprentices, the number of craft apprentices recruited (1,869), was greater than the number forecast (1,713).

(b) Recruitment into the non-technical graded posts

In the year ended 31 March 1960, some 4,754 people were recruited to the clerical and administrative graded posts. Most of them (95%) were recruited into the lower clerical grades. Less than one per cent of all clerical recruits entered as accountancy or secretarial trainees. The balance (5%) entered the higher graded posts. Table 4 distinguishes between those recruited into the lower clerical and the higher clerical graded posts, together with the proportion of recruits who were under 21 and those who were older.

The table also illustrates, in the right hand column, the classic distinction between the two groups of employee in the form of their salary ranges. The salaries of those employed on lower clerical work ranged from £280-£800 per annum, while those who joined the graded posts were placed on a salary range of £625-£2,165 per annum.

Table 4

Recruitment of Clerical, Commercial and Administrative Staff

	Under 21		21 and over		Total		Salary Ranges
Lower clerical posts	No.	%	No.	%	No.	%	£ p.a.
Clerks (General Clerical Grades)	1283	56	991	39	2274	48	240-685 (a)
Shorthand typists and typists	285	13	448	18	733	15	342-661/283-603
Service centre assistants	130	6	337	13	467	10	240-685 (a)
Machine operators	199	9	155	6	354	7	342-603
Drawing office staff	136	6	155	6	291	6	240-625
Demonstrators & trainee demonstrators	81	4	24	1	105	2	283-800
Other NJC staff	90	4	184	7	274	6	
Sub-total	2204	49	2294	51	4498	95	
Graded posts							
Accountancy trainees	20	1	2	*	22	*	
Secretarial trainees	11	*	0	0	11	*	
Graded posts	1	*	222	9	223	5	625-2165 (b)
Total	2236	47	2518	53	4754	.00	240-2165+L.A.

* means the proportion is less than 0.5 per cent

<u>Notes:</u> (a) General Clerical Grades ranged from £240 per annum at age 15 to £525 per annum at 22, rising to £685 with an efficiency bar at £595 p.a. (b) Higher Clerical, Administrative and Commercial Staff grades were numbered from 1, starting at £625 p.a. to Grade 11 at a maximum £2,165 per annum.

<u>Sources:</u> Numbers recruited: EC, 'Annual Report on Education & Training in the Electricity Boards, Statistical Tables for the period 1.4.1959 to 31.3.1960', Table III, June 1960. Salary scales: EC, 'The Electricity Supply Industry Salary Scales for Clerical, Administrative and Sales and Service Staff', Third Edition, May 1963, both EC archive.

(i)   Recruitment to clerical graded posts

The electricity industry's career literature specified the qualifications that it expected from school leavers (aged 15 upwards), or those graduating from university (aged 21 upwards). People with career aspirations who entered the General Clerical Grades, were expected to possess at least one of four qualifications that might eventually enable their promotion to higher graded posts. These were in the form of a university degree; or four GCE '0' level passes, including English and Mathematics; or an Ordinary National Certificate in Commerce; or the Preliminary Examination of one of a recognised professional body such as the Secretarial or Accountancy Institutes.[38] Despite the requirement that formal educational qualifications were

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[38] EC, 'Careers in Electricity Supply for Clerical Administrative and Sales and Service Staff', (2nd. ed., May 1962), Recruitment brochure, EC archive.

necessary for entry to the electricity industry, the industry adopted a flexible approach to those under 21 years old. In 1960, some 41 per cent (913) of those under 21 years did not hold any qualifications; and of those recruited to the General Clerical Grades just one-third (32%) possessed the desired four GCE '0' level passes.[39]

(ii)   Recruitment to administrative posts

Most of the vacant posts above the general clerical level were filled by promotion from below, though some staff were also recruited from outside, particularly where special qualifications, such as a university degree, were required. The two broad occupational areas that required administrative trainees were in the Secretary's[40] and Accountancy[41] Departments. In 1960, twenty-two trainee accountants and eleven secretarial trainees were recruited. Thirty-one of them were under 21 years old and their educational qualifications included GCE 'A' level passes (4 trainees); four or more passes at GCE '0' level (22 trainees); 1-3 passes at GCE '0' level (4 trainees); and one had another (unspecified) qualification. Table 5 shows that the electricity industry appears to have recruited to its specialist training schemes more Electronic Data Processing (EDP) and administrative than accountancy graduates.

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[39] EC, 'Annual Report on Education & Training', June 1960, Table III, EC archive.

[40] The Secretary's Department comprised: Administration, Education and Training, Establishments, Estates and Wayleaves, Insurance, Legal, Public Relations and Welfare.

[41] The Chief Accountant's Department comprised: Capital Expenditure, Costing and Stores, Procedures, Methods and Mechanisation, Internal Audit, Financial Accounts, Revenue and Banking, Statistics and Budgeting, Salaries and Wages, Superannuation, Taxation, Payment of Accounts.

Table 5

Recruitment of Graduates for Non-Technical Posts

Type of Trainees	31.3.1963 No.	31.3.1965 No.	31.3.1970 No.	31.3.1975 No.	31.3.1980 No.	31.3.1985 No.
Accountancy	2	3	1	8	8	3
Administrative	4	17	27	31	27	25
EDP	Not stated	Not stated	10	36	37	12
Total	**6**	**20**	**38**	**75**	**72**	**40**

Notes: In 1970, Administrative trainees included secretarial, legal and 'other' trainees. EDP (electronic data processing) staff were referred to in different years as computing staff or systems analysts, programmers and operators.

Source: EC, 'Annual Report on Education and Training', EC archive. Data are for England and Wales only because GB data are not available for 1963, 1965 and 1970

Members of the existing clerical staff could be recruited into Secretarial Traineeships on similar provisions that applied to the Trainee Accountants Scheme, that is, relevant GCE subjects, preliminary exemption from a professional body or a National Certificate in Commerce. Existing employees could also transfer to the Trainee Accountants Scheme after a period of general clerical work, on similar conditions as those that applied to school leavers. Mature employees who had experience in the industry's accountancy departments and who possessed, through evening study, the Intermediate examination towards a recognised qualification[42] could apply to be enrolled on to the Accountants-in-Training Scheme. For them this meant a planned training course, lasting up to two years, to supplement their previous experience. Day-release facilities were recommended together with other help towards obtaining the final examination certificate of the appropriate professional accountancy body.

Whereas in the technical posts the lowest skilled had the opportunity to train and progress to the higher graded posts, non-technical clerical and administrative

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[42] Association of Certified and Corporate Accountants, the Institute of Cost and Works Accountants, or the Institute of Municipal Treasurers and Accountants.

employees were in competition with people recruited from outside the industry. In 1960 some 223 (5% of total recruits) of the higher graded posts were filled by external recruitment.

Arts graduates

Before 1940 there were few arts graduates[43] recruited into industry and their presence was obscured rather than publicised. However, during the next decade several factors resulted in a demand for arts graduates in industry. One reason was the recognition of 'the shortage of technical graduates that was becoming apparent in some firms'.[44] Another reason for the interest in arts graduates was that the success of the earlier arts graduates had become known, especially where they had reached top management positions, and it had become more fashionable to recruit them.[45] On the other hand, there were factors working against the arts graduates. In the first place, they had to compete with talented youngsters who had left school earlier and established themselves in organisations, especially those with 'A' levels. There was also the impact of the 'bulge' on the employment market and educational institutions, which resulted in the increased supply of educated young people available to industry to compete for posts. There was no longer a shortage of labour and rather than lowering their standards of recruitment in a desperate attempt to satisfy their manpower requirements, companies were in a position to raise recruitment standards.[46] A survey of the attitudes of businesses towards the employment of arts

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[43] In this case 'arts graduates' were defined as all graduates with non-scientific degrees including those in economics, mathematics and law. As quoted in A. Collin, A.M. Rees, J. Utting, *The Arts Graduate in Industry* (1962), p.2.

[44] Ibid., p.7.

[45] S. P. Keeble, *The Ability to Manage. A study of British Management, 1890-1990* (1992), pp.80-81.

[46] Collin, Rees, Utting, *Arts Graduate* (1962), p.20, see also p.86.

graduates undertaken in 1962, found that the important reason for recruiting arts graduates appeared to be, firstly, for their character, and secondly, as a source of recruitment to management positions.[47] There was 'no particular preference' for the class of degree, but it was important that arts graduates possessed the 'ability to fit in'. The main function in which arts graduates were used was in sales and marketing (33%), as opposed to administration (16%), or finance and accounts (7%), though some were employed in production (12%) and some went into personnel work (15%).[48] In 1960 the initial salaries offered to them ranged from at least £501 to £800 per annum. However, those who were aged around 28 or 29 who had joined firms in 1955, were, in 1960, earning basic salaries ranging from £950 to £1,700 per annum. These salaries were equivalent to those awarded to graded administrative employees in the electricity industry in 1963, which ranged from £625 to £2,165 per annum.[49]

The recruitment of arts graduates met with a mixed reception in the electricity industry. In 1956 it was anticipated that more school leavers were likely to go to university and the industry would be unable to maintain its recruitment of talented sixteen to eighteen year olds. With this in mind the concept of recruiting arts graduates was considered very seriously, especially because they had proved their abilities in other industries:

> Many pupils whose academic attainments would have fitted them for student apprenticeship choose to read for an Arts degree instead. They are intelligent men and though clearly they would not become power station designers or research engineers, they could in many cases make good technical administrators (as they do, for example, in the steel making industries, soap and rubber industries). The

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[47] Ibid., p. 85.

[48] Ibid., p. 89.

[49] EC, 'Electricity Industry Salary Scales' (May 1963), EC archive.

possibility of offering selected Arts graduates a special two-year training to fit them for quasi-technical jobs (for example, commercial work) should be examined with the object of increasing the supply of trained minds for technical/administrative appointments.[50]

By the end of 1956 the electricity industry recognised that there was a limited supply of arts graduates and that it was in competition with other industries for them. The notion of giving preferential treatment to arts graduates over existing employees was not, however, wholeheartedly supported by the trade unions, who said they were not opposed to recruiting graduates but that they were concerned that arts graduates should:

be given special access to posts in preference to other employees in the industry [and the trade union] .. *could not support the institution of any special training facilities for graduates which were not available to other employees likely to benefit from them.* [51]

As far as the electricity industry was concerned, it had to recruit more widely for talented students and this meant recruiting arts graduates:

If the industry is to have a reasonable share of the best brains in the country it must look more to the university than it has done in the past as a field for recruitment. On the engineering side there is already a method of recruiting technical and scientific graduates. On the other hand many more undergraduates are reading Arts (e.g. Humanities, Economics, Sociology, Law) than Science or Technology, and it is suggested that the industry cannot afford to ignore the talent possessed by those men and women. [52]

Finally, arts graduates were employed in the electricity industry but their recruitment in boards met with mixed results. They were not treated consistently throughout the industry as a result of different policies that were adopted in individual electricity

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[50] NJAC, 'Recruitment to the Electricity Supply Industry', 28.2.1956, (ETE) 69, 8th Meeting, p3, EC archive.

[51] NJAC, 'Recruitment of Arts Graduates', 11.12.1956, ETE, 10th Meeting, Minute 694(ii), EC archive.

[52] NJAC, 'Recruitment of Arts Graduates', 11.12.1956, (ETE) 81, EC archive.

boards. For example, some boards recruited arts graduates as administrative trainees, while others decided that arts graduates were only to be recruited to fill specific posts:

> *A large scale-industry like ours requires a considerable number of senior administrators and non-technical managers and many such posts are filled by arts graduates. While, however, the industry recognises the special intellectual and personal qualities likely to be possessed by the graduate, many Boards prefer to recruit him from outside to fill a specific post, rather than to engage him directly he comes down from the university. Some Boards and Divisions do, however, recruit newly graduated men or women, particularly to the Secretarial and Accountancy Training Schemes and a number of Arts graduates have been recruited as administrative trainees at the headquarters of both the Electricity Council and the Central Electricity Generating Board.* [53]

Summary

Following nationalisation, the electricity industry used manpower forecasts to identify future shortfalls in technical and non-technical posts. In order to ensure these posts were occupied the industry recruited people and trained them to specific standards. This procedure was intended to serve two purposes (a) to attract people into the industry and (b) to ensure a continuous succession of trained employees. Unfortunately, for a number of reasons, the industry failed to recruit the numbers of trainees who possessed the educational qualifications that were required. The main reasons for the inadequate supply of graduates included the poor image of the industry, the low salaries and inadequate career paths. To overcome the spectre of insufficient technical staff, it was decided to trawl the industry for talented industrial workers who could, with training, become future engineers. But there were forces that worked against such pro-active schemes, in some instances of the industry's own making. For example, there was an age limit that restricted applicants to craft

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[53] EC, 'Careers in Electricity Supply for Clerical, Administrative and Service Staff', (2nd. ed. May 1962), EC archive.

apprenticeship training. They were required to be school leavers and indentured at 21. Manual workers were not considered to be suitable for training if they were over 35. Parts of the industry failed to publicise the manual workers' scheme and the proportion that applied for training was comparatively tiny. The engineering trade union saw the manual worker trainees as being given day release facilities that were more advantageous than those given to their members. Another aspect of the shortfall in recruiting technical staff in the context of the period concerns the bias regarding work that was considered to be male or female oriented resulting in recruitment to horizontally segregated occupations. In the context of recruiting female staff there were five key obstacles. These were: the lack of investment in educational qualifications by young women as a result of lowered expectations. The segregation of girls and boys at school into female and male oriented subjects, which resulted in the exclusion of girls from studying for the type of qualifications required by the ESI's advertisements. The 'poor image' of the ESI would have acted as a deterrent to those youngsters who sought 'glamorous' jobs. In the context of horizontal segregation, recruitment to training schemes that eventually led to women working alongside men in a male dominated environment, was unusual and likely to have been a deterrent for women. Finally, the age barrier to apprenticeships and the Manual Workers' Traineeship Scheme would also have excluded those women who had returned to work after a career break.

It is clear that the industry gave preferential attention to plans to recruit and train staff for technical posts and that the non-technical staff were not treated equally. There were inconsistencies in the industry's approach to non-technical staff training

schemes. Most of the non-technical employees were recruited on leaving school and higher graded posts were filled by recruitment from below. Around a half of those recruited applied for female oriented skilled posts that were horizontally segregated, with a dead-end to any career advancement, and included such jobs as shorthand typists, typists and machine operators. The other half were recruited to the clerical posts that offered career progression to administrative posts or the opportunity to apply for traineeships in the secretarial or accountancy professions. Mature non-technical employees were disadvantaged, compared with their mature counterparts on the manual workers traineeship scheme because, in order for them to enrol on to a training scheme, they had to obtain a recognised qualification through evening study, whereas the manual workers were granted 'generous' day release facilities. External recruitment was almost non-existent for technical staff, but this approach was not consistently applied to the recruitment of non-technical staff. General clerks in the lower graded posts who sought promotion were in competition with people from external sources who were recruited into the higher graded posts. The recruitment of arts graduates into the electricity industry was in theory thought to be a good idea but its practice met with a mixed reception. Discussions took place at a time when the manpower market place had changed and there was no shortage of bright educated school leavers with good qualifications who were able to gain experience in the workplace when the graduates were still at university. Thus the arts graduates found they were in competition with established youngsters when they sought employment.

Finally, one of the most important problems concerning all recruitment procedures was that the industry was unable to act as one employer. Electricity boards did not

always support the recommendations of the industry's National Joint Advisory Council. The usual responses to procedural recommendations were: acceptance, conditioned acceptance, amendment, delay or rejection, which resulted in inconsistencies in the application of schemes connected with manpower throughout the boards.

The majority of those recruited into the electricity industry from schools, colleges and universities, underwent formal, planned training to ensure that they were trained to the industry's standards. The type of training schemes and the numbers that underwent training are considered in the next chapter.

Chapter 3.   Training, Development and Progression

Introduction

The second chapter differentiated between the two main groups of technical and non-technical employees and identified those that were recruited to specific training schemes. This chapter examines the facilities provided by the electricity industry to encourage its employees to become more skilful in their jobs, with the implication that this would enhance their future development and, ostensibly, their chances of career progression. It was apparent from the industry's career literature with its simple career progression diagrams, that talented employees with ambition could develop and progress by improving their skills and qualifications and thus increase their access to promotion. The electricity industry also offered a range of opportunities for self-improvement. In fact, it will be shown that the industry's training record was better than that for the UK and overseas. Historically, the British government was concerned with the quality and decline in the number of apprenticeships but did not reform the system in the same way that Germany had done.[1] Another problem was the effect of the skills shortage on productivity.[2] Within a few years, however, the national training scene changed as a result of concern about competition with Europe, the Single Market and the rest of the world, and the knowledge that 'qualifications in the UK were a ragbag'.[3] One of the criticisms directed at the UK concerned the lack of training time or cash that was

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[1] H. Gospel, *The Revival of Apprenticeship Training in Britain* (October 1997), The Centre for Economic Performance, discussion paper no. 372, pp.4-6. See also, H. Steedman, H. Gospel and P. Ryan, *Apprenticeship: a strategy for growth* (October 1998), The Centre for Economic Performance, p.14.
[2] Steedman, Gospel and Ryan, *Apprenticeship* (1998), p.9.
[3] *The Training Directory 1994* (6th ed. 1994), pp.20-21. See also Part 5: Government Support for Training and Recruitment.

spent on each individual. For example, in 1987 it was found that in some British

firms there was:

> one craft apprentice or trainee for every hundred employees. The German firms
> visited were training one 'technical' and one 'commercial' apprentice for every 20
> employees - five times the British proportion of craft trainees, and ten times the British
> proportion taking both types of trainee.[4]

In 1985 the electricity industry's workforce totalled 133,718[5] employees including

2,158[6] craft apprentices, which means there was one craft apprentice under training

to every 62 employees. Ten years previously, in 1975, the equivalent figure was one

craft apprentice to every 40 employees; and ten years before that, in 1965, there was

one craft apprentice to every 29 employees. The data show that some thirty years

ago training of craft apprentices in the ESI was at its peak and comparable with the

figures for the German firms. Of course, the length of apprenticeships was shorter in

Germany than in the ESI. After a five-year apprenticeship an electrical apprentice in

the ESI was indentured at the age of around 21, whereas the German equivalent was

19 years old.[7] A report published in 1984 linked vocational education[8] and training

policies in Germany, the USA and Japan with their economic competitiveness, and

reported that the UK lacked the widespread training initiatives that had been

implemented by its competitors.[9] In relation to the ESI, it will be shown that training

[4] H. Steedman and K. Wagner, *A Second Look at Productivity, Machinery and Skills in Britain and Germany* (1987), NIER, p92. It should be noted that this study was of the furniture industry and therefore not directly comparable but it does serve as an illustration here.

[5] EC, *Handbook of Electricity Supply Statistics 1989*, (1990), p.98.

[6] EC, 'Education & Training in Electricity Boards' (1985), p.19. The figure 2,158 is for England & Wales, EC archive.

[7] S. J. Prais and K. Wagner, *Some Practical Aspects of Human Capital Investment: Training Standards in Five Occupations in Britain and Germany.* In *Productivity, Education and Training: Britain and other countries compared*, reprints of studies published in the National Institute Economic Review, (Preface S J Prais) (December 1989), p.19.

[8] Defined as 'learning activities which contribute to successful economic performance', in *Competence and Competition. Training and education in the Federal Republic of Germany, the United States and Japan* (1984), NEDO, p.iv.

[9] Ibid., p.iv, and pp.5-6.

facilities were extended to cover schemes for employee self-development. In the years 1965 and 1975 there was one person under training, or studying, to every nine employees, and one to every fifteen employees in 1985. Another criticism mentioned in the report concerned the lack of records or monitoring of employers' training spends.[10] In the ESI, although the volume of training was published,[11] the amount spent on training was not; it was combined in the accounting figures with Welfare and Safety.

It has been shown that the volume of ESI training appears to have been superior to the amount of training provided by many UK companies, and compares well with overseas competitors. However, as the remainder of this chapter will show, the distribution of training facilities to employees and their career progression, was dependent upon the industry's demand for certain skills.

In the early years following the nationalisation of the electricity industry there were more opportunities for promotion through the technical than the non-technical grades, depending on an individual's qualifications and experience. However, the federal nature of the industry resulted in variations in the application of promotion procedures in the Area Boards.[12] It was typical of the newly nationalised industries that they concentrated mainly on industrial staff training, that they publicised 'ladders of promotion' and 'bridges' from the manual grades into management, and promotion paths for graduate trainees into management. The preoccupation with the training

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[10] Ibid., p.70.
[11] In the Annual Reports.
[12] Acton Society Trust, *Training and Promotion in Nationalised Industry* (1951), p.72.

and development of technical staff meant that promotion opportunities were more frequent for this group than for the non-technical staff for whom training, development and promotion occurred more slowly. For those employees who toyed with the idea of progression to the top posts in the ESI, there was no better role model than the nationalised industry's first leader, Lord Citrine,[13] who was proud of and publicised his early career as an electrician. Another chairman at this time, of the Midlands Electricity Board, Alderman Lewis,[14] had also served an electrical engineering apprenticeship. In the context of such men who had risen to the top, the industry's suggestion that there was a ladder of promotion to the top posts was more credible. In succeeding years, too, apprentices rose to the top positions within the industry as chairmen, deputy chairmen, chief engineers, chief commercial officers and other executive positions.

In the context of female employees, it will be recalled from Chapter 1 that after the Second World War social attitudes to women working became more relaxed. Women's career expectations, however, were slow to grow and most were employed in horizontally segregated occupations. There also remained static attitudes to training females. Some organisations that had a shortage of skilled clerical and engineering workers did not contemplate training women because they considered such an activity to be a waste of resources and time. Historically, clerical work became feminised as men moved into white-collar jobs that supervised females, and were better paid. Women were over-represented in clerical, sales and catering

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[13] Lord Citrine, *Two Careers* (1967). See also L. Hannah, *Electricity before Nationalisation. A Study of the Development of The Electricity Supply Industry in Britain to 1948* (1979), pp.354-356.
[14] See Chapter 7, (a) (ii).

occupations but engineering and technology were predominantly male preserves. In the investigation of the training schemes that follow, the part-time female employee should also be borne in mind. In the national economy part-time workers accounted for the increase in the numbers of women working. However, before the 1970s, they received different terms and conditions to full-time employees. They were unlikely to receive training, experienced downward mobility into manual and sales jobs and lower pay in exchange for convenient hours.

This chapter examines, in three parts, the principal methods that were used for developing employees in the ESI. The analysis begins with (a) the formal training schemes for those recruited into the industry's training schemes, followed by (b) facilities for self-development in the ESI, and, finally, (c) the Scholarship Scheme.

(a)   Formal training schemes in the electricity industry

This section examines the formal training schemes that were available to the technical and non-technical employees. The investigation begins with the technical trainee group, which is divided into two categories: (i) craft apprentices and manual workers, and (ii) engineering trainees. This is followed by an examination of training schemes for non-technical employees, also split into two groups: (i) clerical staff, and (ii) administrative employees.

Technical trainees

The philosophy behind the technical training programme was to attract high calibre recruits into the industry and to ensure that the training they received was of the

standard required for the generation and distribution engineers. However, the attraction of training did not prove to be as effective as the industry hoped, except for craft apprentices. In 1960, the recruitment of craft apprentices exceeded the budget. An estimated 955 craft apprentices were required and 1,027 were recruited, 7 per cent more than were needed.[15] This was, presumably, an attempt to make up the shortfall in the number of student apprentices recruited and to counter the wastage of craft apprentices during their training.[16]

(i)   Craft apprenticeships and manual/industrial workers

Craft apprentices

In 1960 there were over 5,000 craft apprentices under training and just under 400 more mature employees in the Manual Worker Traineeship Scheme. Most of the craft apprentices were training to become electricians (62%), fitters (24%), jointers (3%), meter repairers (3%), or they were undecided about their future trade (6%).[17] In 1963 craft apprentices trained for five years, including a probationary period lasting up to a year. The apprenticeship comprised three components: basic training concerning the craftsman's tools and workshop equipment; education at technical college to learn the theory one day a week on a City and Guilds course; and practical workshop training that was preceded by a period spent working with craftsmen. To progress from being a skilled tradesman into higher engineering posts using the route available to student apprenticeship, the craft apprentice had to acquire certain

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[15] EC, 'Annual Report on Education & Training' (1960), Note 6, EC archive.

[16] During the year ending 31.3.1963, some 280 craft apprentices left the industry, 88 left during their probation period and 192 left after their probation. This represented some four per cent of craft apprentices under training during the year. Source: EC, 'Annual Report on Education & Training' (July 1963), EC archive.

[17] EC, 'Annual Report on Education & Training' (1960), Note 6, EC archive.

recognised qualifications such as an Ordinary National Certificate or other credentials that were specified by their own employing board. The majority of craft apprentices (66%) tended to follow the City and Guilds of London Institute. Less than a third (30%) studied for an Ordinary National Certificate and the remainder (4%) followed some other, unspecified, course of study. The numbers of craft apprentices under training and those who transferred to student apprenticeships, declined in equal proportions. Table 1 illustrates at five-year intervals the transfers from craft to student apprenticeships, which formed one per cent or less of craft apprentices. In 1985 there were just two transfers from craft to student apprenticeship and none in 1987, finally eliminating this potential career path to top posts.

Table 1

Craft Apprentices
Transfers to Student Apprenticeship

Date year ending 31 March	Craft apprentices under training No.	Transferred from craft to student apprenticeship	
		No.	%
1960	5412	73	1
1965	7515	81	1
1970	5751	28	less than 0.5
1975	4346	20	less than 0.5
1980	4139	16	less than 0.5
1985	2472	2	less than 0.5
1987	2268	0	0

Source: EC, 'Annual Report on Education and Training', for each year, EC archive.

Manual Workers' Traineeship Scheme

The Manual Workers' Traineeship Scheme was intended to provide a ladder of promotion for manual workers that was parallel to the craft, student and graduate schemes for entrants to the industry. The scheme attracted a wide variety of personnel from all industrial occupations, including foremen and chargehands, skilled and semi-skilled craftsmen and unskilled labourers. In 1957 of the 329

applicants, some 43 per cent were skilled tradesmen, formed from electricians (27%)

or electrical fitters (16%), who would have previously been trained through

apprenticeship schemes. The manual worker trainees sought the qualifications that

would enable them to transfer to the coveted engineering grades, more pay and more

career opportunities.[18] Most of the candidates applied to study for an ONC (52%) or

an HNC (44%) and the remainder for an HND (4%). The ages of the manual trainees

ranged from 22 in one board to 36 in another, which was immediately below the age

ceiling recommended by the Scheme. Table 2 shows, at five-year intervals, the

proportion of manual worker trainees who were appointed to the technical staff.

Table 2

Manual Worker Trainees
Appointments to the Technical Staff

Date Year ending 31 March	Manual Worker Trainees (MWT)	Manual Worker Trainees appointed to technical staff (as a % of MWT trainees)	
	No.	No.	%
1960	379	n.s.	-
1965	481	114	24
1970	183	90	49
1975	123	55	45
1980	102	0	0
1985	48	11	23
1987	122	31	25

Note: n.s. means not stated.
Source: EC, 'Annual Report on Education and Training' for each year, EC archive.

Details of the succession of manual workers to the technical staff are not recorded

before 1962.

(ii)   Engineering trainees

In 1960 there were 2,533 engineering trainees. It can be seen from Table 3 that the

majority of trainees were represented by student apprentices (82%), other technical

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[18] The expectation of higher pay for skills is a point also made by Gospel, *Revival of Apprenticeship Training* (1997), p.3.

trainees (12%) and diploma and engineering trainees (3%).[19] The balance was formed from graduate trainees (2%).

Table 3

Engineering Training Schemes
Types of Trainees - 1960

Type of trainee	No.	%
Student apprentices	2088	82
Other technical trainees①	304	12
Diploma and Engineering	81	3
Graduates	60	2
Total	**2,533**	**100**

Note: ① Includes chemists, draughtsmen and commercial apprentices.
Source: EC, 'Annual Report on Education & Training' (1960), EC archive.

Although they formed the smallest group, graduate trainees were the most important because they were expected to have the potential to fill the highest technical and management posts,[20] but they were the most difficult to recruit.

Graduate trainees

In 1960, of the 60 graduates undertaking technical training, the majority (63%) held either Third Class Honours or a pass degree. The remainder (37%) held a First or Second Class Honours degree.[21] Graduates with a degree in mechanical or electrical engineering from a British university were offered a two-year planned course of training in generation, distribution or commercial engineering. Their training, though planned, did not follow any formal curriculum of lectures and demonstrations. The graduate trainee gained practical experience by working alongside qualified staff and shared the same working hours and conditions. After

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[19] EC, 'Annual Report on Education & Training' (1960), Note 6, EC archive.
[20] Herbert Report (1956), p.84.
[21] The figures for first or second were not recorded in the published statistics and it is assumed that most of them were therefore second class honours but, again, whether upper or lower second is not recorded.

two years' practical experience, the graduate was offered employment as a General Assistant Engineer (GAE) in the area in which they had been trained. The GAE began with a starting salary of at least £800 a year or more,[22] which was the equivalent salary paid to those on the lowest grade, Grade 1, of the Higher Clerical and Administrative Staff salary scales. It was also higher than any of the salaries earned by non-technical staff who were paid according to the salary scales for the General Clerical Grades (see Chapter 2, Table 4).

Diploma and engineering trainees

In 1960, the majority of the 81 diploma and engineering trainees held an HNC (64%) or an HND (21%), a College Diploma (7%) or another qualification (7%). To progress from being an engineering trainee into the higher engineering posts trainees needed to have a diploma or Higher National Certificate supported by practical training. To assist them in achieving these qualifications, they were provided with day release to attend an approved course of study. No details were found that recorded the progression of this group of trainees.

Student apprentices

The training for student apprentices depended on whether they had achieved '0' level or 'A' level passes. Student apprentices with the requisite GCE '0' level passes were given release of one day a week to attend technical college for a Higher National Certificate in Electrical or Mechanical Engineering, accompanied by a planned course of practical training. Student apprentices with GCE 'A' level passes were enrolled on sandwich courses that consisted of six month periods alternating at a

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[22] EC, 'Careers for Graduates in Electricity Supply' (1963), p.19, EC archive.

technical college and in the industry over four years followed, or preceded, by a full

year of practical training.[23] The apprenticeship terminated with a diploma[24] that

enabled an apprentice to obtain graduate membership of the Institution of Electrical

or Mechanical Engineers and subsequently to qualify for Associate Membership.

Students following the HNC course could be transferred to a diploma course.[25]

Other technical trainees

This group of trainees also held a wide range of qualifications. Most entered with

ONC or OND or qualifications 'other than those specified'. Ten of the technical

trainees had transferred, or progressed, from craft apprenticeship and were training to

become draughtsmen.[26]

Non-technical trainees

Training schemes for the development of the non-technical staff were introduced

after those for the technical staff. This delay reflected the industry's urgent and

single-minded demand that focused on essential engineering staff. Whereas training

statistics were compiled for technical staff, equivalent data were not available for

clerical and administrative employees because of the delay in introducing training

schemes for them. However, facilities, in the form of day or block release or

financial help, were made available to both non-technical and technical employees to

pursue their self-development under the Educational Incentives Scheme, which is

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[23] 6-9 months training at manufacturers' works was available to some trainees and was an essential element for those aiming at professional status. Source: EC, 'Careers literature, Student Apprenticeship in Electricity Supply' (3rd. ed. July 1963), p.7, EC archive.

[24] Diploma in Technology, a College Diploma or a Higher National Diploma.

[25] EC, 'Student Apprenticeship in Electricity Supply', July 1963, p.7, EC archive.

[26] EC, 'Annual Report on Education & Training' (1960), Notes on Table I, EC archive.

examined in section (b). By the end of 1963, details of the new Clerical Training

Scheme[27] were released together with details of the number of trainees enrolled to the

Accountancy and Secretarial Training Schemes.

(i)   Clerical trainees

Newly recruited clerks or trainee demonstrators who joined the ESI in 1962 from

school or outside employment, were allocated to a point on the salary scale[28] for

General Clerical Grades along with skilled employees such as shorthand-typists,

tracers and machine operators. The majority of employees in the higher graded

administrative posts (discussed below) began their careers in the general clerical

grades and gained promotion as they acquired knowledge, experience and

qualifications. To progress from being a lower graded clerical worker into the higher

graded posts, the aspiring employee needed to have entered the industry with 'a good

general education'[29] or needed to acquire the qualifications that were specified in

staff vacancy notices. However, the electricity boards did not adhere to the

advertised qualifications and recruited over two-thirds (68%) of clerical employees

with qualifications that were below this standard.[30]

General clerical training was usually provided to those recruited from Grammar

Schools and some Secondary Schools. Trainees were expected to be aged 15-18

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[27] In the introduction to this scheme reference is made to an earlier scheme for 'The Training of Junior Admin and Clerical Staff 1950' and 'The Training of Clerical and Admin Staff 1956' which it replaced, but there is no statistical record of these earlier schemes.
[28] See Chapter 2, Table 4.
[29] A good general education referred to four '0' level GCE passes including English and mathematics, or an Ordinary National Certificate in Commerce, or the Preliminary Examination of a recognised Professional Body (age 15 upwards). Source: EC, 'Careers in Electricity Supply' (May 1962), p.37, EC archive.
[30] EC, 'Annual Report on Education & Training' (1960), Note 14, EC archive.

years old but older recruits were not excluded. Existing employees were entitled to apply for general clerical training but the numbers were limited to those who could be released for training at a time. General clerical trainees were expected to be given experience in general services (receipt and despatch of mail, filing, maintaining records etc) in at least three departments or sections over a total period of three years. Advanced training applied to those who had undergone general training, to newly recruited mature employees and to those who had been employed in the industry for some time. Their entitlement to a place on the course depended on evidence of their work ability and educational achievements. They worked at different organisational levels, in a range of departments, and, where it was possible, in association with more senior employees with the ultimate aim of extending their knowledge and experience over a training period that was for a minimum of two years.[31]

(ii)   Administrative trainees

Non-technical recruits who were not placed in the lower clerical grades, would have been selected to fill one of the Higher Clerical, Commercial or Administrative posts[32] that were classified into ten numbered grades. In 1962, when the promotional literature was published,[33] Grade 10 carried a salary rising to £1,800 a year and overlapped with the managerial salary scale. In order to progress through the graded posts, aspiring employees began their careers in the lower clerical posts. Administrative trainees joined the industry either at the age of 20 upward with a

[31] NJAC, 'Scheme for the Education and Training of Clerical Staff in the ESI' (9.10.1961), Report of the 34th Meeting, Appendix 2, p.3, EC archive.
[32] Such as certain skilled draughtsmen and draughtswomen, demonstrators and housecraft advisers, sales representatives, senior service centre assistants and supervisors, district commercial assistants and above. Source: EC, 'ESI Salary Scales' (May 1963), EC archive.
[33] EC, 'Careers in Electricity Supply' (May 1962), EC archive.

university degree or, at an earlier age, with 'a good general education'. They were

employed in the Secretarial, Accountancy or Commercial[34] departments, gaining

practical experience along with their training. In the year ending 31.3.1963 there

were some 210 trainees, formed from accountancy (123), secretarial (58) and 'other'

(29) trainees. Over half (112) had been enrolled on to the schemes during the year,

and included awards of traineeships to existing employees (43). The trainees

recruited from outside the industry (69) consisted of graduates (6), those with GCE

'A' level passes (20) or passes in GCE '0' levels (43). No educational qualifications

are recorded for existing staff recruited to the traineeships. Of the twenty trainees

who took their final exams during the year, some sixteen achieved passes.[35] Those

who achieved their professional qualifications would expect to progress in steps

upwards in each grade through the administrative staff to senior administrative staff

and then into managerial positions. However, each successive post became more

difficult to achieve towards the peak of the organisational pyramid simply because

there were fewer posts.

Secretarial traineeships were open to clerical employees who held a good General

Certificate of Education and had obtained either exemption from the preliminary

examinations of a professional organisation or a National Certificate in Commerce.

The planned course of training lasted up to four years during which time trainees

were given time off for study. The programme of training was designed to give them

wide experience in a variety of offices and duties across the industry. At the end of

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[34] The organisation of the Secretary's and Chief Accountant's Department were described in Chapter 2. The Commercial Department included sections concerned with Sales Staff, Specialist Advisers, Housecraft Advisers, and Service Centres.
[35] EC, 'Annual Report on Education and Training' (1960), Table IV (B), EC archive.

their traineeship they were expected to have obtained a professional qualification of a secretarial or administrative body such as the Chartered Institute of Secretaries, the Corporation of Secretaries or the British Institute of Management.[36]

The two types of schemes for training accountants comprised one for school leavers and one for existing employees. Whereas school leavers were given time off for study, existing employees were expected to study in the evening. This inequality is particularly noticeable because of the day release that was given to engineers, craftsmen and manual workers. Trainee accountants who were recruited directly from school, or who transferred to the scheme after a period in general clerical work, were required to be exempt from the preliminary examination of one of the professional accountancy bodies. Trainees were taken through a course of study lasting four years and gained experience at all levels of their employing organisation. At the end of their studies they were expected to take the examinations leading to membership of the Association of Certified and Corporate Accountants, the Institute of Cost and Works Accountants, or the Institute of Municipal Treasurers and Accountants. The older Accountants-in-Training who set out to qualify themselves professionally while employed in accountancy departments in the industry, were expected to have passed the Intermediate examination towards a recognised qualification, by means of evening study over a period of two or three years. This achievement was rewarded with a further course of training, lasting up to two years, to supplement their previous experience. They were also given day-release facilities

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[36] EC, 'Careers in Electricity Supply' (May 1962), EC archive.

and other help towards obtaining the Final examination certificate of the appropriate professional accountancy body.[37]

Summary to 3 (a)

Formal training schemes for technical employees took priority over the development of schemes for non-technical staff. Manual worker trainees originated from horizontally segregated occupations such as foremen, chargehands, skilled and semi-skilled craftsmen and unskilled labourers. Craft apprentices, too, at the completion of their training, worked in such horizontally segregated occupations as electricians, fitters, jointers or meter repairers. Thus, those craft apprentices who successfully transferred to student apprenticeship status were likely to be men. Graduates, engineering trainees and student apprentices, too, were likely to have been male. They were required to possess specific entry qualifications that were unlikely to have been possessed by females generally who were known to have had low expectations of careers at this time, and who were diverted at school from studying subjects such as mathematics or science. Graduate trainees bypassed lectures and demonstrations. They were assured of a relatively well paid job after two years of planned practical training but the numbers under training were less than those forecast, as a result of the industry's inability to attract them. Successful student apprentices achieved Associate Membership of a professional institute such as the Electrical or Mechanical Engineers.

Less attention was given to training schemes for non-technical staff. The lower graded clerical posts included employees who trained to become skilled in such

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[37] Ibid.

horizontally segregated occupations as typing and machine operators, and those who became clerks. The training for clerks generally applied to two types of employee: those newly recruited to the industry who underwent general training, and existing employees who had received general training and progressed to advanced training. Both types of training were of a practical nature for a minimum of either two or three years and, at the end of this period, the trainee remained a clerk whose knowledge and experience had been broadened. They could, of course, aim for the higher administrative posts provided that they had a university degree or 'a good general education' and they could apply for a traineeship that, like student apprentices, would result in membership of a professional body. However, inequalities existed in the proportion that were trained and in the facilities granted to existing employees. In 1963 the number of trainees (210) was a minute proportion (0.46%) of the total administrative and sales workforce (45,097) in England and Wales. By comparison, in the same year, student apprentices (2,349) formed around one in ten (11%) of the technical and scientific staff workforce (20,634).[38] In addition, whereas school-leavers and technical staff were given day release for study purposes, existing employees who wished to pursue accountancy qualifications were required to do so in their own time in the evenings. It would appear therefore that there were fewer opportunities for non-technical training than for technical training, which by implication means there were fewer opportunities for females - most of whom worked in non-technical occupations.

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[38] EC, *Handbook of Electricity Supply Statistics 1989* (1990), p.98, Table 54.

(b) Facilities for self-development in the electricity industry

This section considers the facilities provided by the electricity industry for employees to undertake their own self-development under the auspices of the Educational Incentives Scheme. Self-development schemes meant that individuals undertook responsibility for their training, supported by the industry financially, with provision for time off, or other forms of assistance that would facilitate their studies. In providing this additional support the industry helped employees with ambitions, those who were inspired or motivated in some way, to gain qualifications through their own dedication and application to study. Also considered is the apparent thirst for knowledge, the desire by employees to gain more information about the industry in which they worked. There was a demand from employees for places on the industry's industrial training and other schemes, which the industry could not meet. As a result, hundreds of employees had their applications for the Spring and Summer Schools and for other schemes turned down. The evidence shows that the enthusiasm for places on the courses continued over time. The thirst for knowledge is measured by the number of applications for places at the industry's Spring and Summer Schools; applications for assistance to study on correspondence courses and applications for scholarships. With regard to the implications of the self-development schemes for females, it will be shown that opportunities for self-study existed for less than one-third of all trainees, compared with the two-thirds who were recruited to the formal schemes. The most opportunities for self-development in the ESI occurred in the period following nationalisation when there was a shortage of skilled staff. It will be shown that the ratio of trainees to employees increased from one in nine in 1960 to one in fifteen in 1985. Consideration has already been given

to the segregation of employees and to the low career expectations and thus the lack of qualifications attained by women generally. However, the investigation will show that the role of qualifications in determining professional career progression or in following a trade or other skilled vocational activity, was important in the electricity industry in both technical and non-technical occupations. In Chapter 1 a reference was made to the predominance of women in low-paid occupations such as clerical and sales occupations. This should be borne in mind, too, in the following investigation, when it is shown that in 1960 clerical workers formed the largest group (60%) on day or block release; and sales training, which was a predominantly female occupation, was usually undertaken by correspondence course rather than day release.

The section begins with details of the Spring and Summer Schools, each of which lasted for a few weeks during the year, and is followed by an exploration of the Educational Incentives Scheme.

Spring and Summer Schools

The first Spring and Summer Schools were held during 1948 and 1949. Their purpose was to provide an opportunity for employees of all grades from different parts of the industry to get together away from their workplace and to discuss the work of the Electricity Supply Industry, as part of their industrial education.[39] At each school leading personalities from the industry and the trade unions addressed the members, and responded to questions. As a result, information about the policy,

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[39] This term referred to education in the wider significance of the job and the problems of the industry.

the aims, the past performance and the position of the industry was widely disseminated.[40] Although each board employed thousands of workers, the number of places available at each of the schools was strictly limited to between four and six employees from each board. Places were allocated according to whether the employee was graded as an engineer, a manual worker or a clerical or administrative employee. The schools were popular among employees and there were always four or five applications for each place. By 1957 some 34 Schools had been run and attended by around 4,000 employees. In 1960 there were 2,106 applications from employees for places at the schools, but only 430 places were available,[41] which meant that the majority (80%) of applicants were turned down. Even though the number of places was increased to 530 in 1966 there were still 2,000 applications for them,[42] so that three-quarters (74%) of applications had to be rejected. The demand was there but not the resources. The Schools remained in operation into the late 1980s and the last Spring and Summer Schools were attended in 1987, some 40 years after they were initiated in the wake of nationalisation.

The Educational Incentives Scheme

For technical employees, the prescribed route up the career ladder began with qualifications that were obtained prior to, or during, employment in the ESI and supported by the industry's specially designed training courses. Entry qualifications were specified during the recruitment process, but the electricity boards were often prepared to employ people whose credentials were below those specified. Thus,

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[40] NJAC (17.4.1958), Report of the 27th Meeting of the NJAC, EC archive.
[41] NJAC (21.4.1960), Report of the 31st Meeting, p.6, EC archive.
[42] NJAC (21.4.1966), Report of the 43rd Meeting, p.6, EC archive.

qualifications did not provide a barrier to entry to the industry. However, there was an age barrier which restricted individuals from entry to approved training programmes, particularly the apprenticeship and graduate training schemes. Mature[43] non-technical staff who had made progress towards professional examinations could apply for recruitment to the formal training schemes that were designed for older students, such as the Accountants-in-Training Scheme. Mature industrial personnel had access to the Manual Workers' Traineeship Scheme. However, some employees criticised the industry for excluding those who were aged over 40 from formal training schemes.[44] An alternative route for those not eligible for formal training, as a result of their age, lack of qualifications, late development, or other reasons, was provided by the Educational Incentives Scheme, Correspondence Courses or the Scholarship Scheme. The schemes were administered and sanctioned through the employing boards locally throughout the electricity industry. The fundamental criteria were that employees applying to join the scheme could show that they had made progress in their studies; that their chosen subject of study was of benefit to the industry, and appeared on the industry's list of approved courses.

Table 4 shows that in 1960 some 20,309 employees were registered on ESI training schemes. The majority of them (69%) were allocated to ESI designed formal training schemes. The remaining student employees (31%) were given some form of support to pursue their studies for self-improvement under the Educational Incentives

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[43] The definition of a mature employee was obscure, it appeared to include those who were in their early 20's who were excluded, because of their age, from formal training that was designed for those under 21 years old, or school leavers.

[44] Criticism raised in the 'Personnel Forum', in 'Summaries of Lectures, Summer School, Queen's College, Cambridge, 7-15 September, 1960', Electricity Council (1960), pp.74-76, EC archive.

Scheme.

Table 4

Numbers under Training in England and Wales①
Formal and Self-Development Schemes

Type of Training Scheme	1960 No.	1960 %	1965 No.	1965 %	1975 No.	1975 %	1985 No.	1985 %
Formal	14,026	69	13,462	58	11,390	63	4,976	54
Educational Incentives	6,283	31	9,569	42	6,818	37	4,207	46
Total under Training	20,309	100	23,031	100	18,208	100	9,183	100
Total employees	193,165		216,228		172,483		133,718	
Ratio of trainees to total staff	1:9		1:9		1:9		1:15	

Note: ① The figures for Scotland were not available before 1975. For comparison purposes, all data are for England and Wales unless otherwise stated.
Source: EC, 'Annual Report on Education & Training' (1961,1965,1975,1985). Figures for the total number of employees in England and Wales 1961-1985 inclusive, extracted from EC, *Handbook of Electricity Supply Statistics, 1989* (1990), p.98. Includes total number of managerial graded staff.

Some twenty-five years' later, in 1985 the numbers employed within the industry had declined by some sixty-thousand employees, that is by thirty percentage points, but the numbers under training had declined considerably more, by some fifty-five percentage points. This decline is also illustrated by the ratio of those under training to those employed, which widened from one trainee to every nine in employment in 1960 to one trainee to every fifteen employees in 1985.[45] The table also shows that for 1985 there is comparatively little difference in the numbers of employees who were enrolled on to each type of scheme.

During the twenty-year period following nationalisation, there were at least three influences that resulted in higher numbers of trainees. One of these influences, already mentioned, was the rapid growth of the industry. Secondly, industries paid more attention to training as a result of the grant/levy system which was introduced

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[45] EC, 'Annual Reports on Education & Training' (1961, 1985), EC archive.

under the 1964 Industrial Training Act.[46] Finally, Government influence resulted in the industry taking on more young workers and training them, than it needed, as a result of 'the bulge' i.e. a dramatic increase in the number of 15 year olds leaving school in 1961 (20%), 1962 (30%), and 1963 (15%).[47] While the effect of the Industrial Training Act worked in the industry's favour, there were mixed views expressed about recruiting young people 'slightly in excess of anticipated needs'.[48] The industry considered it was 'unrealistic' to increase recruitment by some 20 per cent during the three 'bulge' years[49] it was also felt that the impact of 'the bulge' would put a strain on the new scheme for training clerical staff in the industry.[50]

It can also be seen from Table 4, above, that during the ten year period 1975-1985, the number of trainees plummeted by a half, from 18,208 to 9,183. One of the reasons for this decline is likely to be that the industry had sufficient trained staff to fill its manpower needs for the future. Another probable factor is that because the industry was cutting back on numbers employed, as a result of technological and other improvements, it was less likely to be able to offer employment opportunities at the end of the training period. Boards were undergoing internal reorganisations during the seventies, the buzzword at the time was 'rationalisation', which was not restricted to the ESI:

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[46] Industrial Training Act 1964, HMSO. The grants/levies for the Electricity Supply Industry Training Board (ESITB) are to be found in the Report and Statement of Accounts for the years 1966-1972. In 1970, for example, page 36 of the Accounts shows the levy income was £93,667. and the grants to employers alone amounted to £132,995. See also G. T. Page, *The Industrial Training Act and After* (1967).

[47] NJAC, 'Report of the Carr Committee on the recruitment and training of young workers: The Bulge' (20.10.1960), Meeting No. 32, p.6.

[48] Ibid.

[49] NJAC (20.4.1961), Meeting No. 33, EC archive.

[50] NJAC (19.10.1961), Meeting No. 34, EC archive.

> *In terms of overall manpower trends the* [organisational] *change seems to be towards the rationalisation of existing manning levels (in both employee and managerial groups) towards a 'leaner, fitter' core in which the highest necessary level of skills is encouraged and developed.* [51]

In the ESI rationalisation resulted in staff redundancies and early retirements. These were effected by internal reorganisations that involved, for example, a large number of districts merging into a smaller number of divisions. Other factors that may have affected the future numbers of trainees included productivity drives and clerical work measurement schemes. In addition, by 1984 indicators of Electricity Supply Industry performance had been published for the previous five years.[52] Finally, another probable factor was the abolition of the grant/levy system when the ESITB was dissolved in January 1974.

The remainder of this section examines the effect of the Educational Incentives Scheme on each employee group.

The Educational Incentives Scheme was introduced in 1950 to provide help for those employees who took responsibility for their own improvement. Employees who attempted self-development through a course of study, which was approved by local management, could benefit from the facilities that were available to those enrolled on to the Educational Incentives Scheme. The Scheme provided the opportunity to apply for part-time day release to study at a college; and financial assistance towards the cost of studying consisting of 50 per cent to 75 per cent of registration, tuition and examination fees. In certain circumstances help was given with the cost of

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[51] K. Starkey and Alan McKinlay, *Organisational Innovation. Competitive Strategy and the Management of Change in Four Major Companies* (1988), pp.10-11.

[52] EC, *Indicators of Electricity Supply Industry Performance 1983/84* (1984).

books and travel to and from the college. There was also the opportunity to study

through specialist correspondence courses. The number of people training under the

Incentives Scheme more than halved from around 9,500[53] employees in 1965[54] to

around 4,200 in 1985.[55] Table 5 gives details of the decline in each type of help

given to staff, from which it can be seen that the facilities provided for day/block

release and financial assistance declined more than the correspondence courses.

Table 5

Educational Incentives Scheme - Type of Assistance - 1965-1985
England and Wales

Type of Assistance	1965		1975		1985	
	No.	%	No.	%	No.	%
Day/block release	4,962	52	3,095	45	1,738	41
Additional staff given financial assistance	1,741	18	822	12	572	14
Correspondence courses	2,866	30	2,901	43	1,897	45
Total	9,569	100%	6,818	100%	4,207	100%

Source: EC, 'Annual Report on Education & Training' (1965, 1975, 1985), EC archive.

The three types of assistance that were given to each group of staff to pursue their

personal development, are analysed in Table 6.

Day/block release

It can be seen from Table 6 that in 1965 clerical workers (60%) formed the largest

group to receive day/block release due to the lack of formal training schemes for

them to pursue their studies. By 1985, clerical workers formed a half (51%) of those

receiving day release, compared with (49%) of technical employees, formed from

manual workers (36%) and engineers (13%).

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[53] EC, 'Annual Report on Education & Training' (July 1965), EC archive.
[54] 1965 has been selected as the first year of each ten-year period because the Scheme did not cover all comparable staff in 1960, and there was no separate record of staff who may have been given financial assistance.
[55] EC, 'Education and Training in Electricity Boards' (1985), EC archive.

Financial assistance

The additional numbers who received financial assistance under the Scheme comprised some two-thirds (66%) of technical students in 1965, mostly engineers (45%). By 1985 non-technical students formed the largest group (63%), which suggests that a greater proportion of clerical workers were pursuing part-time evening study than their technical colleagues.

Table 6

Educational Incentives Scheme - 1965-1985 - England and Wales

Type of Assistance	1965		1975		1985	
	No.	%	No.	%	No.	%
Day/block release						
Engineers	1102	22	651	21	228	13
Manual workers	887	18	644	21	623	36
Administrative and clerical ①	2973	60	1800	58	887	51
Sub-total	**4962**	**52%**	**3095**	**45%**	**1738**	**41%**
Additional staff given financial assistance						
Engineers	784	45	320	40	79	14
Manual workers	369	21	199	24	130	23
Administrative and clerical	588	34	303	37	363	63
Sub-total	**1741**	**18%**	**822**	**12%**	**572**	**14%**
Correspondence courses						
Grade unspecified (technical course)	256	9	1239	43	555	29
Engineers (technical course)	365	13	130	4	23	1
Manual workers (technical course)	1521	53	1077	37	621	33
Admin & clerical (technical course)	23	1	4	*	2	*
Salesmanship training ②	701	24	451	16	696	37
Sub-total	**2866**	**30%**	**2901**	**43%**	**1897**	**45%**
Total (excluding scholarships)	**9569**	**100%**	**6818**	**100%**	**4207**	**100%**

Notes: ① 84 per cent were under 21 years old in 1965; ② Salesmanship training for Area Boards only.
Source: EC, 'Annual Reports on Education & Training' (1965, 1975, 1985), EC archive.

Correspondence courses

The correspondence courses were specialist courses for educating the technical or non-technical student in specific subjects. The demand for these courses remained popular among employees whether for the technical or for the salesmanship training courses. They were not likely to enhance the career of the technical student but gave them a better understanding on technical aspects of power station system protection, power plant, boiler house and turbine operation.

The remainder of this section examines each employee group by the type of assistance they were awarded.

In order to determine the potential effect of their chosen course of study on their careers, where possible, the students are analysed into two groups which describe them as studying for 'Career Progressive' or 'Trade, Skills and Basic' qualifications. 'Career Progressive' type qualifications indicate that these students intended to improve their career prospects by studying for qualifications that were fundamental requirements for progression in the ESI. Conversely, 'Trade, Skills & Basic' credentials suggest that the career prospects for these students were limited to the trade or skills they were likely to acquire, because they were not among the type of qualifications required by the industry to enable their further development or progression to higher posts. For example, the 'Career Progressive' classification included professional certification, degrees, national diplomas and certificates. The 'Trade, Skills and Basic' category, on the other hand, included City and Guilds, GCE, RSA, certificates in office studies and other courses of study that were not specified. The analysis begins with those who were given day/block release.

(i)   Access to day/block release to study

It can be seen from Table 7 that in 1960, the majority of those receiving day/block release studied for Career Progressive type qualifications (69%), as opposed to Trade, Skills and Basic credentials (31%). By 1970[56] the distinction between the

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[56] These dates have been selected because 1960 is the earliest date when these statistics were produced, and from 1975 there were changes in comparable statistics for those given day/block release.

types of qualifications had narrowed and the balance had changed to 49 per cent and 51 per cent, respectively. Those aged 21 years and over formed a comparatively small proportion of clerical and administrative students compared with their younger counterparts, but the majority of them studied for 'Career Progressive' type qualifications. In 1960 most of those under 21 were more Career Progressive (60%) than Trade oriented (40%) but in 1970 the balance had reversed and more were Trade oriented (57%) than Career Progressive (43%)

Table 7

Educational Incentives Scheme - Day/Block Release Students

Qualification Sought	1960		1970	
	No.	%	No.	%
Career Progressive				
Engineering	535	82	586	87
Manual/industrial	210	64	383	27
Clerical & Admin - under 21	742	60	866	43
- 21 and over	228	96	456	81
Sub-total	**1715**	**69%**	**2291**	**49%**
Trade, Skills & Basic				
Engineering	115	18	90	13
Manual/industrial	126	37	1037	73
Clerical & Admin - under 21	503	40	1126	57
- 21 and over	10	4	106	19
Sub-total	**754**	**31%**	**2359**	**51%**
Total students	**2469**	**100%**	**4650**	**100%**

Note: Percentages are calculated for each staff group. For example, Engineering.
Source: EC, Annual Report on Education & Training' (1960, 1970), EC archive.

Another noticeable difference in Table 7 concerns the increase, in 1970, in the number of manual workers in the Trade category (73%), because more of them took City and Guilds courses. The proportion of those passing their City and Guilds examinations (1960 75%, 1965 80%, 1970 72%) was higher than those taking their National or Ordinary National Certificates (1960 71%, 1965 48%, 1970 71%). In 1965, more manual workers failed (52%), than passed (48%), their ONC examinations. It may be that they were encouraged to take their examinations before

they were ready to do so because the industry's forecasts for craftsmen and technical staff meant that the numbers being trained were insufficient to meet future demand. They may also have been deterred by the news that the trade association for the engineers' was trying to raise educational standards. Discussion at one ESI national meeting had attempted to 'close the door' on the career route that was open to manual workers. The Electrical Power Engineers Association took the view that the minimum qualification for entry to the technical staff should be raised to HNC level or its equivalent.[57]

Table 8[58] analyses the examination pass rates for each group of employees. It can be seen that total pass rates ranged from 68 to 80 per cent in 1960 and from 66 to 82 per cent in 1970. In 1960, of those taking their examinations, more students in the Career Progressive group achieved passes than those in the Trade group, with the exception of the manual workers. In 1970, both Career Progressive and Trade groups achieved high success rates. The success rate for the career progressive engineer group was higher (at 75% in 1960 and 82% in 1970) than for the industrial employees (70% in 1960 and 67% in 1970). However, given the qualifications already achieved by the engineers in their prior periods of study, their accomplishments while noteworthy were, perhaps, more easily attainable than for the industrial workers who had not undergone such prolonged periods of study to train their minds.

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[57] ESITC (30.6.1965), Minutes, National Joint Advisory Council for the ESITC, 14th Meeting, pp.7-8.
[58] Some of the numbers, for those passing examinations, on which percentages are based in Table 8, are small. Therefore, interpretation of the results should be treated with caution.

Table 8

Educational Incentives Scheme
Examination Pass Rates - Day/Block Release Students

Examination Pass Rates	1960		1970	
	No.	%	No.	%
Career Progressive				
Engineering	120	75	261	82
Manual/industrial	44	70	85	67
Clerical & Admin - under 21	36	77	73	59
- 21 and over	46	81	89	68
Sub-total	246	78%	508	57%
Trade, Skills & Basic				
Engineering	2	40	20	80
Manual/industrial	24	73	195	73
Clerical & Admin - under 21	44	62	126	70
- 21 and over	1	50	46	75
Sub-total	71	22%	387	43%
Total Pass Rates				
Engineering	122	73	281	82
Manual/industrial	68	71	280	71
Clerical & Admin - under 21	80	68	199	66
- 21 and over	47	80	135	71
Total	**317**	**100%**	**895**	**100%**

Note: Some of the numbers used in Table 8, on which percentages are based, are small. Therefore, interpretation of the results should be treated with caution.
Source: EC, 'Annual Report on Education & Training' (1960, 1970), EC archive.

(ii) Additional staff awarded financial assistance

It will be recalled from Table 5 above that this group formed 18 per cent of trainees in 1965 and 14 per cent in 1985. The number of employees who were given financial assistance halved from 1,741 in 1965, to 822 in 1975 and declined further to 572 in 1985. The clerical and industrial groups were affected but to a lesser extent than the engineers, possibly because the engineers had already been trained.

From Table 9 it can be seen that in 1965[59] the majority of engineers (70%) followed Career Progressive qualifications. It would appear that fewer engineers (42%) pursued the studies necessary to enhance their careers in 1970 because the majority

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[59] This exploration is restricted to 1965 and 1970 because details of the type of courses studied by those employees who received financial help to study are not recorded after 1970.

(58%) pursued 'Other', unspecified, subjects in the Trade category.[60] The majority of

manual workers (70% in 1965, 74% in 1970) tended to undertake courses that led to

Trade, Skilled & Basic type credentials. In 1965, younger clerical workers opted

mostly for Trade type qualifications (67%) and 1970 (87%). Those aged 21 and over

in 1965, pursued Career Progressive qualifications but, in 1970, the majority opted

for Trade type credentials (55%). No details are recorded of the examinations taken

by the additional students who received financial help.

Table 9

Educational Incentives Scheme
Additional Staff given Financial Assistance - 1965, 1970

Type of Course/Employee Group	1965		1970	
	No.	%	No.	%
Career Progressive				
Engineers	550	70	255	42
Manual	109	30	67	26
Clerical & Administrative - under 21	73	33	27	13
Clerical & Administrative - 21 and over	256	70	195	45
Sub-total	988	57	544	36
Trade, Skilled & Basic				
Engineers	234	30	355	58
Manual	260	70	191	74
Clerical & Administrative - under 21	149	67	179	87
Clerical & Administrative - 21 and over	110	30	238	55
Sub-total	753	43	963	64
Total	1741	100%	1507	100%

Source: EC, 'Annual Report on Education & Training' (1970), Table XI (F), EC archive.

(iii) Correspondence courses

Measured as a proportion of employees studying under the Educational Incentives

Scheme, correspondence courses became increasingly important. In 1965 the

proportion of those taking the courses was one in three (30%) of Incentives Scheme

students, compared with some 45 per cent in 1985 (Table 5 above). Correspondence

courses were written and marked by specialists employed in the industry, assisted

where necessary by others outside the industry, including manufacturers of supply

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[60] EC, 'Annual Report on Education & Training' (1970), Table XI (F), EC archive.

equipment. Courses were centrally organised. The industry recognised that there were many employees for whom correspondence tuition was the only means of following an educational course. For example, those in remote areas, those who needed to fit in with their domestic arrangements and those whose local colleges had too small a demand to set up classes.[61]

Technical courses

The correspondence courses were of a specialised nature relating to aspects of the CEGB's operations. The courses enabled manual and semi-skilled workers to improve their skills. Engineers and a few non-technical employees also undertook the courses, probably research staff. Enthusiasm for the correspondence courses was high and applications to enrol on them always exceeded the numbers of places available, especially for the Power System Protection course. In 1963 the Correspondence Scheme received some 1,400 applications for its Power System Protection Course, but 1,150 (81%) had to be turned down. There were only places for 250 to participate due to lack of resources, and this was the maximum number for whom tutors could be found from the Boards.[62] As early as 1956, some 1,241 employees had enrolled for the course on training boiler house operators, which was more than three times the number that had been anticipated when the scheme started. In addition to boiler house operators, students included other manual workers, engineers and chemists.[63] Table 10 shows that in 1965 manual workers were the most likely group to undertake correspondence courses (53%), by 1985 the

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[61] NJAC (28.4.1954), Report of the 18th Meeting, EC archive.
[62] NJAC (16.4.1964), Report of the 39th Meeting, p.9, EC archive.
[63] NJAC (19.4.1956), Report of the 23rd Meeting, EC archive.

proportion was 33 per cent but it is not known how many manual workers were in the group of 'grade unspecified' students (29%).

Non-technical courses

The main correspondence course for non-technical employees in the distribution boards was the Salesmanship Training Course. This course had been rewritten since vesting day and was run on by the British Electrical Development Association.[64] It can be seen from Table 10 that the number studying sales training formed, on average, around a quarter of all those enrolled on the Correspondence Scheme.

Table 10

**Educational Incentives Scheme - Correspondence Courses
1965, 1975 and 1985**

Employee Group	1965		1975		1985	
	No.	%	No.	%	No.	%
Technical staff						
Grade/employee group unspecified	256	9	1239	43	553	29
Engineers	365	13	130	4	23	1
Manual workers	1521	53	1077	37	621	33
Clerical & administrative staff ①	23	<1	4	*	2	*
Non-technical staff						
Salesmanship training ②	701	24	451	16	696	37
Total	**2866**	**100**	**2901**	**100**	**1895**	**100**

Notes: ① Most (84%) were under 21 years old in 1965. ② Salesmanship training in Area Boards only.
Source: EC, Annual Reports on Education & Training' (1965, 1975, 1985), EC archive.

Summary to 3 (b)

When the electricity industry was nationalised and schemes for employee improvement were published, there was a demand for places that the industry could not meet, evidenced by applications for places at the Spring and Summer Schools, and on the Correspondence Courses. The Education Incentives Scheme was introduced for students who were ineligible for places on the formal training

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[64] NJAC (17.4.1958), Report of the 27th Meeting, EC archive.

schemes. The Incentives Scheme provided its students with three kinds of support: day/block release, financial help or facilities to study under the Correspondence Scheme. Table 5 showed that in 1965, day/block release was given to over half the students but some twenty years' later, the specialist Correspondence Courses were utilised by students most frequently.

The aim of this chapter has been to identify groups of employees that had enhanced their chances of career progression by obtaining qualifications which the industry sought for those posts on the ladder of promotion. At the beginning of the chapter the industry was compared with foreign and UK companies and it was shown that, after nationalisation, during periods of growth, the electricity industry trained more employees than most companies in the UK. However, as growth peaked, and productive, technological and other improvements were made, fewer people were needed and fewer employees were trained. It is also likely that the numbers of employees enrolled on the Educational Incentives Scheme declined because of the widespread availability of educational opportunities which meant that people were more likely to have obtained formal qualifications before joining the industry. In Table 4 above the ratio of those under training was presented. Table 11 below gives the ratio of those undertaking self-development courses to their employee group in 1965 and 1985. It can be seen that the engineer group had the lowest ratio of students to engineers in 1965, marginally ahead of clerical and administrative workers, which might imply that these groups had better career opportunities at this time.

Table 11

Educational Incentives Scheme
Ratios of students to employee groups

Employee Group	1965			1985		
	Students	Total staff in group	Ratio	Students	Total staff in group	Ratio
	No.	No.	No.	No.	No.	No.
Engineering	2,251	23,568	1:10	330	22,160	1:67
Manual/industrial	2,777	133,608	1:48	1,374	70,326	1:51
Clerical & Admin	4,285	46,499	1:11	1,948	37,411	1:19
Total (No.)	9,313	203,675	**1:22**	3,652	129,897	**1:36**

In the context of the likelihood of women seeking self-development, it was shown from Chapter 1 that women in general had low expectations of a career and were not thus motivated to seek qualifications, yet they were important in the ESI to those seeking career progression. When women's interest in a career was at its lowest, the opportunities for self-development in the ESI were at a peak, especially for school leavers. Correspondence courses were said to accommodate those who lived in remote areas or to fit in with domestic arrangements, and it is accepted that some of the technical courses were specialised. However, day release, rather than a correspondence course, for sales training may have been better for the domestic arrangements of female sales trainees.

(c)   The Scholarship Scheme

The main purpose of this final section to the chapter is to complete the exploration of self-development schemes with an examination of the Educational Incentives Scholarship Scheme. The electricity industry provided two types of scholarships, the first commenced in 1952, under the Educational Incentives Scheme, and was open to applications from all employees. The second scheme offered a university

scholarship[65] and was introduced in 1958 specifically 'to enhance graduate recruitment'.[66] Both types of scholarships were important because they offered people the opportunity to attain qualifications that would help to improve their career mobility. However, in this section, it will be shown that opportunities to obtain scholarships were better for engineers and potential engineers than they were for other employees because of the industry's need to maintain the supply of qualified technical staff. In addition, the number of scholarships awarded under the Educational Incentives Scheme was less than those given to school-leavers under the University Scholarship Scheme, who were recruited as potential engineers. Because the names of the Educational Incentives Scheme scholars were published, it has been possible to measure their career mobility and to trace the career paths of those who progressed to higher management posts.[67] Unfortunately, because the University Scholarship Scheme was a part of the formal recruitment and training procedure, the names of those who received awards under this scheme were not published so that their progress could not be traced to enable comparison with the Educational Incentives Scheme scholars. The issue of scholarships to female employees is dealt with in Chapter 10. However, it should be borne in mind in the context of gendered awards that, as will be shown in the following investigation, scholarships were awarded to a tiny number of employees. In addition, opportunities to obtain

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[65] NJAC, 'Scholarship Awards for Student Apprentices' (29.4.1958), ETE 108, EC archive.

[66] D. Williams, 'Education and Training in the Electricity Supply Industry', in Summaries of Lectures, Apprentices School held at St. John's College, Oxford, Electricity Council (1963), p.48, EC archive.

[67] Research for each of the scholarship holders was undertaken by Margaret Nisbet as part of this PhD thesis. Details of the scholars were found in the reports of the National Joint Advisory Council, in *Electricity*, and *Joint Consultation*, published for internal use by the Electricity Council, EC archive. Information on career progression, until 1972, was obtained from the biographical details published annually in the *Electrical Who's Who*, publication of which by the Electrical Review, was discontinued, inhibiting further research. Additional searches were made in annual editions of the *Electricity Supply Handbook* published by Electrical Times.

scholarships were better overall for the horizontally segregated technical (73% of total awards) than non-technical (27%) employees.

University Scholarship Scheme for School Leavers

The University Scholarship Scheme for school leavers[68] was introduced with the aim of maintaining a succession of highly qualified technical staff and was a part of the formal recruitment process. It is mentioned briefly here to distinguish it from the scholarships that were provided under the Educational Incentives Scheme. This later scholarship scheme for school leavers was seen by the industry to be comparable with university scholarships that were offered by such organisations as British Thomson Houston, the General Electric and English Electric Companies.[69] The Coal Board had started a Technical Scholarship Scheme in 1948 that offered one hundred scholarships each year to those who wanted to pursue scholarships in mining or in other technical subjects.[70] This represented a ratio of about one scholarship to every seven thousand employees. The electricity industry's University Scholarship Scheme had sent two hundred scholars to university over a five-year period,[71] a ratio of around one scholarship to every four thousand employees.[72] Both industries offered the technical scholarships to scholars employed within their industries and to external scholars in their recruitment programmes.

[68] EC, Joint Consultation (August 1959), p.7, EC archive.
[69] NJAC, 'Scholarship Awards for Student Apprentices' (29.4.1958) (ETE) 108, EC archive.
[70] National Coal Board, *Report and Accounts* (1946), pp.33-34.
[71] D. Williams, 'Education and Training in the Electricity Supply Industry', in Summaries of Lectures held at the Apprentices School, St. John's College, Oxford (1963), p.48, EC archive.
[72] The coal industry calculation is based on wage earners in 1947 quoted in G. L. Reid, and K. Allen, *Nationalized Industries* (1975) p.84, Table 13. The electricity industry calculation is based on the average employment for 1958-1962, quoted in EC, *Handbook of Electricity Supply Statistics 1989*, (1990), p.98, Table 54.

Educational Incentives Scholarship Scheme

Whereas the University Scholarship Scheme for School Leavers awarded some 200

technical scholarships during the period 1958-1962, the Educational Incentives

Scholarship Scheme awarded less than half that number (97) to all employees over

the same period, and forty-three of these scholars were also engineer graded staff.

However, the introduction of the University Scholarship Scheme for School Leavers

resulted in an increase in the number of scholarships awarded under the original

Educational Incentives Scholarship Scheme. The Educational Incentives Scholarship

scheme initially offered just 12 scholarships a year to be competed for by a

workforce of some 161,000.[73] Allocation of the 12 awards was split between six

manual workers,[74] and six of the combined group of technical, clerical and

administrative[75] staff.[76] The scholarships were limited to adult employees, and were

not given to juniors under training.[77] Those who by part-time study had attained the

necessary entry qualifications for a university or other full-time course competed for

scholarships. It can be seen from Table 12 that over the twenty-year period from

1953 to 1972 there were some 2,210 applications for scholarships and awards were

granted to 369 of them, a ratio of six applicants to every scholarship awarded.

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[73] EC, *Handbook of Electricity Supply Statistics 1989* (1990) Table 54, Part 1, p.98. This total includes Technical & Scientific, Administrative & Sales and Industrial employees. Managerial grades, Technical trainees and Apprentices are excluded.

[74] There were 197,652 industrial employees.

[75] At the time there were 53,376 employees in these two groups made up of: 13,707 Technical & Scientific and 39,669 Administrative & Sales employees. Source: EC, *Electricity Statistics 1989* (1990), p.98.

[76] NJAC (19.7.1951), Report of the 11th Meeting, EC archive.

[77] NJAC (17.4.1958), Report of the 27th Meeting, EC archive.

Table 12

ESI Scholarship Scheme for Existing Employees
Applications for Scholarships 1953-1972

Year	Applications	Places available	Applicants per place
	No.	No.	No.
1953-1957	841	60	14
1958-1962	402	97	4
1963-1967	474	136	3
1968-1972	493	76	6
Total	**2,210**	**369**	6

Source: EC, Reports and Accounts for the years ended 31st March 1961 p.57; 1962 p.40; 1963 p.53; 1964 p.63; 1965 p.61; 1966 p.68; 1967 p.51; 1968 p.43; 1969 p.45; 1970 p.47; 1971 p.47; 1972 p.47; EC, Annual Report 1972-73, p.37, EC archive.

The table also shows that the majority of applications for scholarships were made during the first five years of the scheme, when there were fourteen applications for each scholarship. This was a period when the only opportunity for academic advancement, for most people, was by self-development but presumably, in successive periods people realised that their chances of securing an award were comparatively low and fewer applied for the scholarships.

It can be seen from Table 13 that of the 400 scholarships that were granted from 1953 to 1977, inclusive, most of the scholars were employed either on the generating side of the electricity industry (47%) or in the Area Electricity Boards (34%).

Table 13

Scholarship Holders - Employers - 1953-1977

Type of Electricity Employer	Total scholars	
	No.	%
CEGB/Generating Divisions	186	47
Area Electricity Distribution Boards	135	34
Central Electricity Authority/Electricity Council	12	3
Miscellaneous locations such as laboratories	22	5
Sub-total	355	
Not known	45	11
Total	**400**	**100**

Table 14 analyses the distribution of the scholarship awards to the three main staff

groups, at five-year intervals over the twenty-five year period between 1953-1977. It

can be seen that there was a bias towards scholarships that were awarded to

engineers. Of the 400 scholars, almost three-quarters (73%) were granted to

technical staff: most of these were awarded to engineers (56%) and considerably

fewer to manual workers (17%), the remaining scholarships (27%) were granted to

the non-technical clerical and administrative staff.

Table 14

Scholarships 1953-77 - Analysed by staff groups

Staff Group	1953-57 No.	%	1958-62 No.	%	1963-67 No.	%	1968-72 No.	%	1973-77 No.	%	Total No.	%
Engineers	20	5	43	11	93	23	49	12	18	5	223	56
Clerical & Admin	15	4	25	6	38	10	21	5	8	2	107	27
Industrial	24	6	17	4	9	2	15	4	5	1	70	17
Total	59	15	85	21	140	35	85	21	31	8	400	100

Note: Percentage calculations are based on the total number of 400 scholarship holders.

The main reasons that the engineer group did better than the others in getting the

most places for scholarships may be because the engineer grades had better access to

information about the scheme or that it was passed on through their Association.[78] In

addition, the number of awards was decided on the basis of qualified candidates

available and the industry's future needs for staff in scientific, engineering and other

fields, which was also biased towards engineers.

There was a decrease in the number of scholarships awarded following the peak of

the 1963-67 period which is likely to have been due to complaints that the CEGB had

been awarded the greater number of awards between 1963-1967. There had been

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[78] The Electrical Power Engineers Association.

some disagreement among the employing boards about the distribution of scholarships to the generating side of the industry. Between 1963 and 1967 the number of scholarships awarded to CEGB employees greatly exceeded those that were granted to area board employees. Of the 132 awards, some 105 (80%) were awarded to CEGB scholars, and 27 (20%) went to Area Board scholars. One of the reasons suggested for the higher proportion of CEGB scholarships was that the scheme seemed especially attractive to the graduate staff in research establishments and project groups. These groups sought higher degrees, or the opportunity to carry out specialist projects, which were in subjects that the CEGB recognised as being of value to the board in its work. Academic details of the scholarships that were granted between 1953 and 1965 are shown in Table 15.[79]

Table 15

Type of scholarships awarded 1953 - 1965
Distribution of scholarships across each staff group

	Eng. No.	Cler. & Admin. No.	Manual No.	Total Scholars No.
PhD	7	0	0	7
MSc	17	1	0	18
Post graduate courses (technical)	4	0	0	4
Sub-Total	**28**	**1**	**0**	**29**
Technical Scholarships				
First degree (technical)	45	4	10	59
HND	0	0	24	24
Diploma (technical)	15	4	12	31
Other technical scholarships	17	0	1	18
Sub-Total	**77**	**8**	**47**	**132**
Non-Technical Scholarships				
First degree	8	41	0	49
Barrister	0	1	0	1
Diploma	0	1	0	1
ARIBA	5	1	0	6
Personnel Management	0	1	0	1
Not stated	0	4	0	4
Sub-Total	**13**	**49**	**0**	**62**
Total	**118**	**58**	**47**	**223**

[79] The table gives details for scholarships that were awarded between 1953 and 1965 so that it can be compared with Table 16 which shows the venues at which the scholarships were undertaken. Of the 177 scholarships awarded after 1965, no venues are recorded for 114 (64%) of them.

Table 15 shows that at least 148[80] (66%) of the scholarships were predominantly in engineering and science subjects that were undertaken by engineers (62%), industrial workers (32%) and non-technical (6%) graded employees. The engineer graded scholars, who were granted over half (53%) of the total scholarships during this period, also formed the greater proportion of those taking higher degrees (97%) and first degrees (49%). Eight of the scholarships were awarded to engineers to study for the non-technical BSc (Econ). Clerical and administrative employees received a quarter (26%) of scholarships during this period; eight of which were for technical scholarships, and 45 (42%) for first degrees. Industrial staff, who focused solely on technical subjects, were awarded one-fifth (21%) of the scholarships, made up from nine per cent of awards for first degrees (9%) and almost two-thirds of the scholarships awarded to study for diplomas (64%). None of the industrial workers sought a higher award, presumably because if they did have a first degree they would already have achieved engineering status.

The scholarship regulations stipulated that scholars were required to secure places for themselves at their chosen educational institution. Table 16 shows that over half (53%) secured places at universities and over a third (37%) selected either technical colleges (30%) or polytechnics (7%).

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[80] Details of the type of scholarships for those seeking higher degrees and postgraduate studies were not specified for thirteen engineers who were granted PhD or MSc scholarships.

Table 16

Venue for Scholarship Courses 1953-1965
Scholars in each staff group

Venue	Engineers		C&A		Manual		Total	
	No.	%	No.	%	No.	%	No.	%
University	65	55	44	76	10	21	119	53
Technical College	35	30	4	7	27	57	66	30
Polytechnic	4	3	3	5	8	17	15	7
School of Architecture	3	3	0	0	0	0	3	1
College Arts & Crafts	2	2	1	2	0	0	3	1
Faraday House	0	0	0	0	1	2	1	*
College Commerce	0	0	1	2	0	0	1	*
Bar	0	0	1	2	0	0	1	*
Not stated	9	8	4	7	1	2	14	6
Totals	**118**	**53%**	**58**	**26%**	**47**	**21%**	**223**	**100%**

Notes: Percentage columns may not sum to 100 per cent due to rounding.
        * means that the proportion is less than 0.5 per cent.

Scholars in the clerical and administrative group were more likely to seek university places (76%) than the engineers (55%) or industrial staff (21%). Over half (57%) of the manual workers and almost a third (30%) of the engineer group obtained places at technical college, compared with a small proportion (7%) of clerical and administrative staff.

Some good results were obtained from those who finished their courses. For example, in 1973 five First Class Honours were awarded. Another feature of the scheme was that the Electricity Council, which maintained contact with the employing board, monitored the progress of the successful candidates. Where a successful candidate had expressed to the Scholarship Secretary a wish to be employed in a particular area, this was passed on to the Board.

> On completion of their studies, scholarship holders may or may not return to the posts which they previously occupied. Boards will anticipate the return of scholarship holders by deciding in advance the work on which they will be employed on return. In some cases they may arrange periods of training to fit them for positions appropriate to their qualifications and experience.

The Scholarship Committee are interested in the progress made by former scholarship holders; therefore Boards are invited to inform the Secretary of the Scholarship Committee annually for a period of two years on the posts held by returned scholarship holders.[81]

By 1968 concern was expressed about the number of scholarship holders who, on completion of their courses, had not returned to the employment of their boards or had left the industry soon after their return. A 'moral obligation' was subsequently introduced obliging successful candidates to return to the industry for at least two years on completion of their studies.[82] Where a candidate resigned, the relevant board was approached to find out the reason. If the leaver had potential then attempts were made to retain their services. Where it was felt an awardee was not making progress their departure was not pursued. The Scholarship Committee could have made various suggestions regarding the scholar's future, for example, the Committee might have suggested employment for the scholar, which the board might have refused on the grounds that they were aware of the scholar's needs and capabilities, and that the scholar was not ready. Generally, however, the scholars were promoted following successful completion of their courses.

Career progression

It was possible to trace the progression of some 39 (11%) of the 369 employees who were granted scholarships between 1953 and 1972. At least four of them had made progress in their careers outside the industry. The remaining 35 were either engineers (16), clerical and administrative (16), or industrial (3) staff. Few of them

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[81] NJAC (10.3.59), ETC, 15th Meeting, Appendix V, Regulations - Part II paragraphs. 20 and 21, EC archive.

[82] NJAC (18.4.1968), Report of the 47th Meeting, p.2, EC archive.

appeared to have moved outside their employing boards. Table 17 shows the employing organisations analysed by the scholars' staff group. Reading across the first row it can be seen that eight clerical and administrative scholars were nominated by the Divisions/CEGB, three of whom successfully transferred to the Area Boards, seen in the second row, by the increase from seven to ten. Similarly, one engineer originally nominated by the CEA/EC, sought career progression in an Area Board. In total, the Area Boards gained four scholars who had originally been nominated either by the Divisions/CEGB or the CEA/EC.

Table 17

Scholarship Holders - Career Progression
Employing Board at time of Scholarship: 1953 – 1972

Employer	Engineers		Clerical & Admin		Manual Workers		Total	
	Orig. No.	Last No.	Orig. No.	Last No.	Orig. No.	Last No.	Orig. No.	Last No.
Divisions/CEGB	6	6	8	5	1	1	15	12
Area Boards	8	9	7	10	2	2	17	21
CEA/EC	2	1	1	1	0	0	3	2
Total (No.)	16	16	16	16	3	3	35	35
(% of scholars 1953-72)	8%		16%		5%		9%	
Total scholars 1953-72	205	56%	99	27%	65	18%	369	100%

Notes: The column headed 'Orig.' refers to the scholars' original employer.
The column headed 'Last' refers to the last known employer of the scholars who progressed.

It would also appear from the above table that, as a proportion of the total scholars within each group, the clerical and administrative group (16%) were more successful in their careers than were the engineers (8%) or manual workers (5%).

The first scholarship holders stood a better chance of reaching senior positions than those who followed them. Table 18 analyses at five-year intervals the total number of scholarship awards together with the number of scholars from each period who progressed to senior positions. As a proportion of the total number of awards made

in each period, it can be seen from the table that the most successful years for scholarship holders were the first five years of the scheme when the number of awards that were made was restricted to twelve scholars. In 1953-1957 one in five (19%) scholars reached more senior positions whereas in subsequent periods the success rate averaged around one in twelve. It can be seen that during the period 1963-67 when the highest number of awards was made (140 awards), only one in sixteen (6%) scholars made progress to senior positions. There were, of course, more opportunities for promotion in the earlier years of nationalisation. This was a time when the industry was short of engineering staff. Furthermore, the industry monitored the progress of scholarship holders and appeared keen to ensure that the efforts of the scholars were rewarded with promotion.

Table 18

Career Progression of Scholarship Holders
Numbers Progressed by Number of Scholarships Awarded: 1953 – 1972

	1953-7		1958-62		1963-7		1968-72		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Number who progressed	11	19	8	9	9	6	7	8	35	9
Total number of awards	59		85		140		85		369	

Table 19 shows the type of scholarships awarded to this career progressive group. Eight of the scholarships were for higher degrees which formed almost a quarter (23%) of the total, compared with Table 15 above, in which the higher degrees formed one in eight (13%) of all scholarships.

Table 19

Career Progression of Scholarship Holders
Type of Scholarship Awarded 1953-1972

Type of Award	Engineers No.	Clerical & admin No.	Manual workers No.	Career scholars No.
PhD	1	0	0	1
MSc	4	3	0	7
First degree	8	11	1	20
Bar	0	1	0	1
HND	0	0	2	2
Not known	3	1	0	4
Total	**16**	**16**	**3**	**35**

Table 20 shows that most of those who progressed went to university (63%), a higher proportion than the total scholars who applied for university places (53%), shown in Table 16 above.

Table 20

Career Progression of Scholarship Holders
Institution attended by Scholars 1953-1972

Institution	Engineers No.	Clerical & admin No.	Manual workers No.	Career scholars No.
University	11	10	1	22
Technical College	0	0	2	2
Bar/LBS	0	2	0	2
Not known	5	4	0	9
Total	**16**	**16**	**3**	**35**

Finally, of those 35 scholars who progressed in their careers, six of them were promoted to senior (3) or top (3) management posts. The three that became top managers were engineer scholars. The three who reached senior management in the CEGB were formerly clerical and administrative scholars. All had been to university to take their degree courses, and nearly all of them had remained with the CEGB. Table 21 shows the senior and top management posts reached by the scholars together with their employing boards.

Table 21

Career Progression of Scholarship Holders 1953-1972

	CEGB No.	Area Board No.	Total No.
Engineering group			
Chief Executive	1	0	1
Deputy Chairman	0	1	1
Director-General	1	0	1
Clerical & Admin group			
Secretary	2	0	2
Financial Controller	1	0	1
Total	**5**	**1**	**6**

Although the manual workers did not reach top management posts, at least three of them reached comparatively senior management positions: one became a power station superintendent; one became an assistant chief engineer and one became a district engineer.

Summary to 3 (c)

The number of people who were awarded scholarships under the Educational Incentives Scheme was comparatively minute when compared with the actual number of employees. The Educational Incentives Scholarship Scheme created an elite by allocating one scholarship for every four thousand employees. This elite was confirmed by the Scholarship Committee when it monitored the progress of the scholars after they had completed their courses. However, the employing boards did not necessarily agree with what, by implication, is likely to have been construed as interference in their affairs. By 1965 almost a quarter (23%) of former scholarship holders had left the industry and a half of them had taken up teaching, or other educational work. The industry responded carefully to this huge loss of apparent potential and investment by stating that the former scholars' new line of work would

be of direct benefit to the industry.[83] By implication, of course, they would have been of more benefit if they had remained in the industry's employment.

The purpose of the scholarship scheme had been to enable selected employees to attend full-time education at a higher educational institution at a time when educational opportunities were limited:

> *The purpose of the Scholarship Scheme was to select employees for full-time higher education at universities, technical colleges and other education institutions for periods of from six months to three years.* [84]

Another aim of the scholarship scheme was later minuted more directly:

> *to enable late developers to catch up on educational opportunities which they had missed earlier in life.* [85]

It would appear, however, that the boards had lost sight of the main aims of the scheme, which became biased towards the graded engineers. Indeed, the number of awards made under the Educational Incentives Scholarship Scheme were only increased as a direct result of the University Scholarship Scheme for School Leavers, which was introduced to recruit potential future engineers. The evidence has shown that more of the Incentives Scheme Scholarships were given to engineers than to clerical and administrative or industrial workers. Most of the scholarships were in engineering and science subjects and over half of the engineers aimed for higher degrees.

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[83] NJAC (ET) (2.4.1965), 13th Meeting, Minutes 560-566, pp.4-5, EC archive.
[84] NJAC, 'Electricity Supply Scholarships, Regulations - Part I for the Guidance of Applicants' (10.3.59), 15th Meeting, Appendix V, p.1, EC archive.
[85] NJAC (15.4.1971), 53rd Meeting, p.7, EC archive.

The earliest scholars were more likely to progress in their careers than subsequent scholars. Of those who progressed in their careers, almost two-thirds (63%) had been to university. Six of the thirty-six successful scholars achieved top management posts: three were from the engineer group and three were from the clerical and administrative group.

Manual/industrial staff applied for assistance to study under the Manual Workers' Traineeship Scheme rather than scholarships because of the lower entry levels that were required by the Manual Workers' Traineeship Scheme, this subsequently resulted in amendments to the scholarship regulations to ensure that they were included. Indeed, at least three of the manual workers, who were granted scholarships, reached comparatively senior, but not top, management positions.

It has been pointed out that engineers predominated in the scholarship awards and there was a presumption that improved qualifications led to improved career opportunities. It was argued that the administrative and clerical applicants stood less chance of receiving an award because they sought qualifications in subjects such as law for which there was a limited demand, or management studies which could be better obtained through shorter courses outside the scheme.[86] However, despite the bias towards engineers, two of the people in the non-technical group reached senior management positions and became the equivalent of company secretaries in the generating board. Of the nine scholars who reached senior management positions,

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[86] NJAC (17.4.69), Report of the 49th Meeting, p.8, EC archive.

most of them (6) were employed by the generating board which, as one employer, had fewer career progression opportunities to top management than did the fourteen area electricity organisations each of which had its own management board.

The aim of Part 1 was to examine the recruitment, training and career progression of the electricity industry's employees who benefited from the electricity industry's formal training and self development schemes by acquiring qualifications that would enhance their promotion prospects. These employees also had the potential opportunity, as a result of the qualifications they had achieved, to benefit from career progression into management positions. In Part 2, The Development of Electricity Industry Managers, the attitudes towards management development will be investigated, along with research into those senior managers who attended the external Administrative Staff College, Henley, and those who attended the electricity industry's own internal Senior Managers' Course.

PART 2. THE DEVELOPMENT OF ELECTRICITY INDUSTRY MANAGERS

The purpose of Part 1 was twofold: first, to outline the context of women in paid employment and the reasons for their failure to reach top management posts, and second, to begin the investigation of the electricity industry's source of potential future managers by examining its recruitment and training practices. The purpose of Part 2 is to examine the development of electricity industry managers. Chapter 4 investigates the attitude of the electricity industry to management development. Chapter 5 attempts to measure the effect of management courses on management succession in the industry, and Chapter 6 considers the evaluation of managers.

Chapter 4. The Attitude of the Electricity Industry to Management Development

This chapter begins by examining (a) the background to management education generally from the 1950s. It then focuses on (b) the background to management education in the electricity industry and its implementation in (c) the identification of managers and their development. Finally, the chapter examines (d) the attitude of the electricity industry to the use of business schools for management development.

(a)   The background to British management education 1950 - 1987

Formal education specifically for management hardly existed in Britain before the Second World War, apart from courses leading to the qualifications of professional bodies such as the IEE. However, interest in developing management skills in the business sector took off after the Second World War and led to the establishment of

Britain's first business school, the Administrative Staff College at Henley, in 1947.[1]

During the same year the British Institute of Management (BIM) was established

with the aim of improving standards of management in Great Britain and providing

its own membership qualification. The BIM acted as an examining body in

management until the 1960s when it transferred this job to the Further Education

sector in the shape of the Diploma in Management Studies.[2]

In America, the Harvard Business School in Business Administration had been

founded in 1908. In 1957 the American Management Association, had a programme

of 1,200 courses, seminars and conferences on management education. In the UK, in

1956, the BIM listed 188 management courses, about two-thirds of which were run

by technical colleges.[3] During the period 1945-1960 technical colleges were the

main suppliers of management education. Courses for managers were provided by

some independent management centres and some universities offered post graduate

management diplomas for existing managers. In the 1960s the demand for

management education resulted in the expansion of courses and the numbers of

students. The graduate business schools were established, and courses were

developed in universities and colleges of further education.[4] As a result of lobbying

[1] M. Peel, *Management Development and Training. A survey of current policy and practice*, British Institute of Management (BIM), (1984), pp.7-19. A more recent and extensive exposition is found in S. P. Keeble, *The Ability to Manage* (1992), pp.93-149. See also, J. F. Wilson, *Management Education in Britain. A compromise between culture and necessity*, in R. P. Amdam, (Editor), *Management Education and Competitiveness. Europe, Japan and the United States* (1996), pp.133-149.

[2] Peel, *Management Development* (1984).

[3] Ibid.

[4] H. Rose, *Management Education in the 1970s: Growth and Issues* (1970), HMSO.

by Business School advocates,[5] the two Business Schools, the London Graduate School of Business Studies (LBS)[6] and Manchester Business School (MBS),[7] recommended by the Franks Report[8] admitted their first students in 1966 and the first business graduates emerged from these Schools in 1967. Between 1965 and 1971 the combined total output of business graduates from all UK schools was less than 2,000, that is an average of 285 a year, whereas it was some 20,000 a year in the USA.[9] To put this into context, by using the output figures for graduates and the figures for home populations, the ratio of business graduates per head of population can be calculated. For the UK the ratio is one business graduate to every 196 thousand people in the population compared with one business graduate to every ten thousand people in the USA.[10] In 1969, the Business Schools were attacked in the Mant Report,[11] which highlighted the deficiencies in the education received by MBA students, and drew attention to their detrimental effect on the morale and effectiveness of other managers. He claimed that the success of any organisation depended far more on the work of 'the rest' who could never aspire to nomination to a business school, than on the select few who could, and much effort was devoted at this time at attempts to validate training. In 1970 the Rose Report forecast the need for at least doubling the facilities for management education by the mid-70s.[12] Other

[5] W. Barnes, *Managerial Catalyst. The Story of London Business School 1964 to 1989* (1989), pp.16-23. See also, J. F. Wilson, *The Manchester Experiment. A History of Manchester Business School, 1965-1990* (1992), pp.9-14.

[6] Barnes, *London Business School* (1989), p.26.

[7] Wilson, *Manchester Experiment* (1992).

[8] Lord Franks, *British Business Schools* (1963), BIM.

[9] BIM, *Business School Programmes* (1971).

[10] Figures for the UK population taken from CSO, *Facts in Focus* (5th ed., 1980), Central Statistical Office, p17, Table 1. USA Population figures from US Department of Commerce, *Statistical Abstract of the United States 1990*, The National Data Book, (110th ed.), Bureau of the Census, p.7.

[11] A. Mant, *The Experienced Manager - A Major Resource* (1969), BIM.

[12] Rose, *Management Education* (1970), HMSO.

management education centres were also in existence. Ashridge was independent, Woking was owned by British Rail, Ashborne Hill was owned by the British Steel Corporation, others were owned by large public or private sector organisations, e.g. Cranfield School of Management, Roffey Park and Sundridge Park Management Centre. Henley, which had practically monopolised this field since its inception in 1947, now had additional competition for its funding and courses. In fact, Henley had trained managers from the Railway and London Transport Executives between 1948 and 1954 but following a study of training requirements, they decided to set up their own staff college for management development.[13] This college, the British Transport Staff (BTS) College, held eleven courses for senior managers between 1969 and 1981 but the courses were moved to Ashridge Management College when the mansion that housed the BTS College was sold in 1982.[14]

Despite the measures that had been taken to facilitate management education, nearly twenty years after the first business schools were established a survey into management development and training, conducted in 1984, found that little had changed, and commented:

> *management development and training remains for most an act of faith.*[15]

Some three years' later the Handy Report[16] came to a similar conclusion when it compared the training of British managers with the superior methods used in the

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[13] P. Bancroft, *The British Transport Staff College at Woking* (1997), pp.12-13.

[14] Ibid., p.5 and pp.54-55.

[15] Peel, *Management Development* (1984), BIM.

[16] *The Making of Managers. A report on management education, training and development in the USA, West Germany, France, Japan and the UK* (1987), Handy Report, NEDO.

USA, Japan, France and Germany:

> *The key conclusion of this challenging report is that most managers in the USA, the Federal Republic of Germany, France and Japan have been educated to a higher level than in the UK. Moreover, many more managers in these four countries have had the benefit of formal and systematic policies for continuing education and development.* [17]

It will be shown in section (b) that the electricity industry remained irresolute about tackling the issue of management training and development for some twenty years after nationalisation but this indecisiveness was resolved with the imposition of the Industrial Training Act in 1964. The legislation ensured that the various electricity boards co-operated with the co-ordination of schemes for management development along with trade union officers and educational experts through the newly constituted Electricity Supply Industry Training Board (ESITB) that emerged as a result of the Act.

(b) The background to management education in the electricity industry

In 1956 in an Inquiry into the ESI[18] both criticised and congratulated the industry for its management development and training endeavours. The chairman of the Inquiry commented:

> *one of the major concerns of the industry must be to ensure that men are being trained to fill adequately the most responsible posts.* [19]

While commending the electricity boards for their endeavours in this field he perceived that the industry lacked a formally organised scheme for management

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[17] Extracted from the Foreword to *The Making of Managers* (1987), NEDO.
[18] Herbert Report (1956).
[19] Ibid., p.44, paragraph 167.

development and succession, and said that their efforts were:

no substitute for a deliberate scheme under which men are carefully selected, trained and advanced in particular posts so that they emerge in their middle life as potential leaders of the industry. .. The best possible training for potential top managers is the practical one of doing jobs for themselves at successive levels of difficulty and status. [20]

In the electricity industry the people who were classified into the managerial category did not present a true reflection of all the staff with managerial responsibility. A study of British managers,[21] in which the ESI participated, quoted figures for a labour force in the electricity industry of 226,000, in 1969.[22] The study estimated that there were approximately 15,000 staff with managerial responsibility, a ratio of one manager to every 14 employees (after deducting all of those who were classified as managers from the total). Statistics that were published for the industry, however, gave the total managers in England and Wales as 1,773,[23] which results in a management ratio of one manager to every 104 employees. The discrepancy between these ratios results from the number of people who were classified as 'managers' and the thousands who were claimed by the survey to have 'managerial responsibility' but who were not graded as managers. Neither would they have been classed as 'supervisors'. Industrial staff supervisors would have been graded as Foremen or Chargehands whereas engineering, clerical and administrative graded staff with supervisory responsibilities were less easily identified so that the number of supervisors employed in the electricity industry was never recorded.

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[20] Ibid., p.86, paragraph 326.

[21] T. W. Leggatt, *The Training of British Managers: A Study of Need and Demand* (1972), NEDO, HMSO.

[22] GB total for England and Wales (total 208,227) and Scotland.

[23] EC, *Handbook of Electricity Supply Statistics 1989* (1990), Table 54, p.98. Employment is for England and Wales only.

The Electricity Supply Industry Training Board (ESITB) was responsible, through its

Sub-Committee C (Management and Supervisory Training), for the industry's

decision to identify its supervisors so that they could be trained. In fact very little

had been done about training supervisors in the largest nationalised industries when

they were surveyed within a few years following nationalisation.[24] The Ministry of

Labour sponsored a scheme that had been imported from the United States, which

suggested ways in which supervisors could be taught to handle men. The scheme,

known as 'Training Within Industry' (TWI), received little support from the

nationalised industries which were reluctant to support it even though some 170,000

supervisors in private industry had been instructed under the scheme.[25] The

electricity industry gradually participated in the scheme but it was some fifteen years

after the TWI initiatives that the ESITB, through its Management and Supervisory

Training Committee, found it necessary to clarify the role of a supervisor for training

purposes. The Committee decided that the definition of a supervisor used by the

Ministry of Labour was appropriate for application within the electricity industry:

> a "supervisor", as distinct from a manager, is someone who exercises control by
> actual 'overseeing', inspection and direction in the area of operation. [26]

The industry used this definition to explain which employees were, in fact,

supervisors:

> This definition provides a basis for assessing which of the employees in the
> electricity supply industry could be described as a "supervisor". The particular point
> is that he or she is in regular face-to-face contact with a working group the size of
> which may vary but over whom he or she traditionally exercises some formal
> authority. It is not possible at present to estimate the total number of supervisors in
> the industry, much less the size of the training problems. [27]

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[24] Acton Society Trust, *Training and Promotion* (1951).
[25] Ibid., p.62.
[26] ESITB, 'Identifying the Supervisor' (22.9.1966), Paper ITB(TC/C)3, EC archive.
[27] Ibid.

During the same year, in the autumn of 1966, there were some 11,831 foremen and chargehands responsible for supervising industrial staff of whom there were some 141,509, a ratio of one supervisor to every twelve industrial employees. All of the engineer graded technical employees (except for technical staff trainees, and those working in planning departments and headquarters) were considered to be supervisors because they directed the work of foremen and other employees.[28] Some 24,599 employees were graded as engineers in 1966[29] but it is not known how many of them were employed in planning departments or headquarters, so that it is not possible to estimate how many of them worked in a supervisory capacity. In the discussion about the definition of supervisors employed in the technical, clerical and administrative occupations, the Training Committee was informed that no figures were available regarding the number of supervisors employed in these areas and it did not pursue the suggestion that it should obtain such information. Indeed, subsequent discussion about the training of supervisors continually veered towards industrial staff supervisors. From the mid-1970s over three thousand supervisors annually were trained but no records were published as to whether they were industrial, engineering or clerical and administrative staff, apart from the clerical staff supervisors. At least one in ten in 1975 were sales supervisors, rising to one in six (17%) in 1987.[30] Thus the thousands of individuals with managerial responsibility in the electricity industry who were classed as supervisors found that the application of the term manager eluded them. It was not until privatisation that

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[28] Ibid.

[29] EC, *Handbook of Electricity Supply Statistics 1989* (1990), Table 54, p.98. Employment is for England and Wales only.

[30] EC, 'Annual Report on Education & Training' (1975), EC archive.

many of them gained this sought after status usually through a change in job title rather than through promotion and/or increased salary. There was no such problem in identifying managers for training and development purposes.

(c)   Identification of managers and their development

When an individual was classified as a manager in the electricity industry that individual's salary and status along with their seniority and level of responsibility were clearly defined. Electricity industry managers were subject to the terms and conditions of employment that came within the scope of the National Managerial and Higher Executive Grades Committee (NJM),[31] it did not cover such top managers as Chief Engineer, Chief Commercial Officer, Chief Accountant or Secretary.[32] The ways in which employees were allocated to a particular salary point is illustrated by a point and band system. Within a national salary point range of 1-35, there would be an allocation of several overlapping bands, in the case of managers, for example, the Bands might be: NJMI, NJMII etc. to NJMVIII. Points 1-8 on the scale might fall within Band NJMI, points 4-12 within Band NJMII and so on. The lowest points representing the most junior manager posts, such as district administrative officer on a small site. Middle managers included people with such designations as district engineer, district commercial engineer, district administrative officer, head of a department in a large power station, or manager of a smaller station and those in equivalent posts in an electricity board, area, regional or divisional HQ. Senior managers included such designations as district manager, station manager, area

[31] H. Self and E. M. Watson, *Electricity Supply in Great Britain* (1951), National Board Series, pp.134-135.

[32] C. Collier, *Southern Electric. A History* (1992), Southern Electric, pp.44-45. See Herbert Report (1956), pp.45-46.

senior officer or assistant chief officer in an electricity board, region or division, and more senior appointments. The term 'manager' was strictly limited and controlled to specific posts and the development of the post holders, like supervisors before them, was eventually set out in an ESITB Recommendation.[33]

Management development and training had existed in the electricity industry since the 1950s but there was no single body with total responsibility for management training and many of the Area Boards had their own training centres at which management courses were held. Such training included a fortnight's residential course for power station superintendents on the principles and practices of management and six managers had been sent on three monthly courses at the Administrative Staff College at Henley. By 1962 the industry had taken some

> *85 places at Henley over the past fourteen years - more than any other nationalised industry.*[34]

This support had been assisted by an agreement between the industry and Henley to pay £300 per student for a minimum of six students a year, an agreement that eventually resulted in the electricity industry's places at the College 'indirectly subsidised in part by other industries'.[35] Places that had been taken by the nationalised industries before 1962 are shown in Table 1.

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[33] ESITB, *Recommendation 16: On Management Training and Development* (December 1968).
[34] EC, Internal memorandum from M R Hyde to Mr J A Wedgwood, 'Administrative Staff College, Henley' (7th November 1962), EC archive.
[35] Ibid.

Table 1

Usage of Henley College by Nationalised Industries before 1962

Nationalised Industry	No.	%
Electricity Industry	85	28
National Coal Board	80	26
British Transport Commission	61	20
Gas Council	40	13
BBC	16	5
Cable and Wireless	10	3
BEA	8	3
Colonial Development Corp.	5	2
BOAC	2	1
Total	**307**	**100%**

Source: EC, Internal Memorandum from M R Hyde to Mr J A Wedgwood, 'Administrative Staff College, Henley' (7 November, 1962), EC archive.

During the mid-1950s, it was thought of management training in the largest nationalised industries that:

> *Management training has often been introduced to meet some pressing need, such as a shortage of top managers, in which training may be confined to developing a few "fliers", or to improving the standard of supervision.* [36]

Some ten years after nationalisation there was no firm foundation or consistent approach to management training within the electricity industry and discussion about the handling of management development, at a one day Secretaries' Conference in 1962, exposed the diverse views, procedures and practices of electricity boards.[37] By 1964 boards were using two distinct paths, or methods, in order to procure managers. There was an elitist path, which was frowned upon by the industry, for those who were thought to have potential and who were 'groomed' for higher positions.[38] The other route embraced many more employees who had evolved through the process of

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[36] The Acton Society Trust, *Management Succession. The Recruitment, Selection, Training and Promotion of Managers* (1956), p.43.

[37] EC, 'Report of Conference on Management Selection and Training' (27.6.1962), pp.1-21, EC archive.

[38] L. Hannah, *Engineers, Managers and Politicians* (1982), pp.128-129.

appraisal and development.[39] It was apparent that electricity boards had introduced a diverse range of individual schemes, which reflected the federal[40] nature of the industry. These uncoordinated board schemes underwent major legislative change with the introduction of the 1964 Industrial Training Act, which permitted the electricity industry to establish its own Training Board (ESITB). The principal effect of the ESITB was to push the electricity industry into doing something tangible and organised about management development. It enabled training policy to be centralised while leaving decisions about managerial manpower requirements to each electricity board, except for the administration of the central panel for nominations to the Administrative Staff College at Henley. By the end of March 1967 the ESITB had established a separate committee, Sub-Committee C, to deal with management and supervisory training. It aimed:

> *to advise on the nature and content of training required for supervisory and management staff of Electricity Boards.* [41]

The membership of this Committee was formed from representatives from the employing boards, employee representatives from the four main trade unions and expertise was provided by senior educational members from the Regent Street Polytechnic. The impetus provided by the Industrial Training Act resulted in a co-ordinated approach to management education throughout the electricity industry, in England, Wales and Scotland.

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[39] ESITB, 'Review of Management Training in the Industry' (27 June 1967), Paper ITB (TC/C)12, p.2, EC archive.

[40] For some of the problems concerned with federalism see Hannah, *The Electricity Council: Federalism and Finance*, in Hannah, 'Engineers, Managers and Politicians' (1982), pp.193-207.

[41] ESITB (22 September 1966), First Meeting, Minute 7, EC archive.

Within a relatively short time after its inception, and as a result of its deliberations, the ESITB published, in 1968, for internal use, a Recommendation on Management Training and Development, which concerned all levels of line and staff management in the industry. It placed the responsibility for management training and development policy and its overall implementation with the most senior level of each board: the chairman, deputy chairman and chief officers. The industry did not recruit management trainees as such, and individuals for whom the training provision was made were identified from within three broad categories of management: Junior Managers, Middle Managers and Senior Managers. Apart from the functional and practical experience gained from development in post, the importance of appraisals and the influence of the individual's own manager in helping to develop effective training,[42] some other aspects of more formal programmes were recommended. Junior Managers were usually nominated for courses provided by the industry or by polytechnics, technical colleges and consultancy organisations.[43] The course for the Diploma in Management Studies was recommended for junior managers but sponsorship was vague in its application. This meant that those who were not sponsored as a result of their appraisal, but who wanted to take the Diploma, had to do so in their own time on a part-time basis.[44] The main purpose of educating middle managers was:

> to enable individuals to improve their understanding of the influence of human, financial, commercial and technological factors, and of their inter-relationship, on management activity as a whole.[45]

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[42] ESITB, 'Recommendation 16' (1968), p.11
[43] Ibid., p.14
[44] Ibid., pp.10-11.
[45] Ibid. p.15.

It was recommended that middle managers attended internal courses that were supplemented by external courses so that they had the opportunity to exchange experience with people on similar levels in other organisations. External courses that lasted 4-12 weeks such as those held at the graduate business schools, universities, polytechnics and independent management training organisations were recommended. The development of senior managers depended on whether they were on the threshold of or already occupying senior management jobs. 'Threshold senior managers' were expected to benefit from executive programmes in the UK, under the stimulus of guidance from leading personalities and specialists, at the London and Manchester Business Schools; the London-Sloan Fellowship Programme, and the main General Management Course (GMC) at the Administrative Staff College, Henley. For existing 'senior managers already in post', facilities were available in the UK on the General Management Appreciation Course (GMAC), at Henley, and overseas at the Harvard Business School; the Massachusetts Institute of Technology; the IMEDE Management Development Institute, Lausanne, and the Centre d'Etudes Industrielles at Geneva. The onus was on electricity boards to recognise the courses, conferences or seminars that would be of benefit to their senior managers.

(d)   The attitude of the electricity industry to the use of business schools for management development

The attitude of the electricity industry to the use of business schools for management development is measured here in two ways. The first measure concerns the support that the industry gave to the business schools in the form of managers who were enrolled as students to assist with their management education. The second measure

relates to the financial support that was given to the business schools in response to their appeals for sponsorship.

Use of business school courses for educating electricity industry managers

Before and after the nationalisation of the electricity industry there was not a consistent or co-ordinated approach to management development. A chief officer, normally the Secretary, or the Personnel Manager, within each organisation undertook administration for management training and development within the industry. The responsibility for implementing policy locally was assigned to the officers in charge of the management units as one means of ensuring their essential commitment.[46] The Electricity Council and the CEGB provided internal courses at their own training centres. In addition, all of the electricity boards used external courses. Although the Electricity Council co-ordinated the arrangements for making nominations to Henley from the 1950s through to the 1970s the electricity boards made their own arrangements for their managers to attend other external courses without prior discussion. This haphazard approach meant that managers were not being developed to a consistently applied standard until the industry's training body published, for internal use, a proposal for management training and development,[47] which recommended courses at specific business schools for each type of manager.

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[46] ESITC, 'Recommendation No. 39, Management Training and Development' (October 1977), EC archive.

[47] ESITB, 'Recommendation 16' (1968). The Recommendation took account of the views of the Management and Supervisory Training Committee, trade unions and educationalists and the report on management training produced by the Central Training Council.

It can be seen from Table 2 that during the period 1948-1982 at least 253 electricity managers attended courses at the Administrative Staff College (ASC), Henley. Attendance was consistent except for the period 1967-70 inclusive, and there are a number of possibilities for this irregularity. Ashridge Management College had received 120 managers from seven boards during the period 1966-1970,[48] this period also more or less coincides with the period when Sir Norman Elliott was chairman of the industry. It also coincides with the admission in 1966 of students to the London and Manchester Business Schools. Another coincidence might be the publication of the Mant Report in 1969 with the resumed intake of GMC students at Henley in 1971 (nominations for which were made in 1970). It may have been that the industry was trying to steer away from the 11 week General Management Course to the General Management Appreciation Course which it started using in 1968 (the former being recommended for 'threshold' senior managers and the latter for those senior managers already in post). At least three things happened at Henley College in 1972 which may have been effected because of the depleted figures for 1966-70. In 1972 a new Principal was installed at Henley; there was also a reduction in the length of the GMC from 11 to 9 weeks. Another important change concerned the number of places made available by Henley to the ESI. From 1972/3 the number of places were increased to 12-15 (previously 8-10 places had been made available but not necessarily filled or accepted by Henley). These changes may be significant. They may be a reflection of Henley's need to change its image. Henley no longer had a dominant or leading role in management education, it had to compete with the new Business Schools which had the promotion and backing of industry and government,

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[48] Letter from Ashridge Management College to the Chairman of the Electricity Council (28 April 1970), EC archive.

with rising costs which were passed on to its consumers annually in the form of

increased fees. In its favour was the system of 5 and 10-year conference refresher

courses, when past students were invited back for a nominal fee.

Table 2

Attendance at Business Schools by Electricity Boards: 1948-1982

| Electricity Board | Henley | | Ashridge |
| | 1963-72 | 1948-1982 | 1966-70 |
	No.	No.	No.
SEB	1	11	9
SSEB	0	1	4
NORWEB	1	10	33
LEB	2	16	30
YEB	5	19	21
CEGB	15	80	21
EEB	4	12	2
SEEB	2	9	0
SWEB	3	9	0
EMEB	4	11	0
MEB	3	16	0
SWaEB	2	9	0
Manweb	1	7	0
NEEB	3	9	0
EC	8	34	0
NSHEB	0	0	0
Total	**54**	**253**	**120**

Source: Ashridge: Attachment to a letter from Ashridge Management College to Chairman, Electricity Council (28 April, 1970). Henley: EC, Attendance List - ASC Henley 1948-1964, and memorandum and minutes for subsequent years, (all EC archive.)

Over the 35-year period 1948-1982 just 253 managers attended the ASC Henley, in

fact, this is a relatively small number of managers because it is only twice the

number of managers who went to Ashridge in five years. In the ten year period,

1963-72, some 54 electricity industry managers attended the ASC, Henley, compared

with twice that number, some 120 managers, who attended Ashridge in half the time,

that is over the five year period, 1966-70. Henley College never managed to equal

Ashridge College for the number of students over a comparable period (between

1948-62, 84 ESI managers attended Henley College, and between 1973-1982, 115

ESI managers attended Henley College).

It is noticeable from Table 2 that over half of the England and Wales electricity boards did not send any managers to Ashridge and that 105 managers were sent by just four boards: NORWEB (33), London (30), Yorkshire (21) and the CEGB (21). Interestingly the Electricity Council, which organised the Henley Panel and nominations, did not send any managers to Ashridge during this period.

Attendance at Henley for the years 1948 to 1982 inclusive, was relatively well documented. With the exception of the ASC, Henley, information about attendance at the other business schools by electricity industry managers is irregular and haphazard, however, there are some facts available which show that some of the industry's managers were being sent on external courses. In 1969 some 155 senior managers attended external courses that lasted between one and four weeks. Among the centres attended were those at Henley, Ashridge, the Polytechnic of Central London, the London and Manchester Business Schools, Oxford, Cambridge, Strathclyde, Leeds and Leicester, Maddingley Hall and the Tavistock Institute.[49] During the years 1977 and 1982 inclusive all of the boards are said to have used the General Management Course at the Administrative Staff College, Henley,[50] but the usage of other business schools by the Area Boards in particular during this period was haphazard. Table 3 provides a snapshot of the 114 courses used over the five-year period 1977-1982.

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[49] Leggatt, *Training of British Managers* (1972).
[50] EC, 'Register of External Management Courses used by Electricity Boards' (April 1982), p.18, EC archive.

Table 3

Usage of Business Schools by Electricity Boards - 1977-1982

Electricity Boards	Courses used by Electricity Boards	
	No.	%
CEGB	53	46
LEB	13	11
NORWEB	10	9
EC	9	8
EEB	8	7
SWEB	7	6
SSEB	4	3
MEB	3	3
YEB	3	3
SEB	2	2
EMEB	2	2
SEEB	0	0
SWaEB	0	0
Manweb	0	0
NEEB	0	0
NSHEB	0	0
Total	**114**	**100%**

Note: The table records annual usage of courses by electricity boards. Attendance by managers was not recorded in the Register. Attendance on the GMC at the Administrative Staff College, Henley, is said to have applied to each board and this course is not included in the table.

Source: EC, 'Register of External Management Courses' (1982, 1983), EC archive.

It can also be seen from Table 3 that the CEGB used the courses most frequently (46%). Total usage by the Area Electricity Boards in England and Wales amount to 43 per cent of the total, although some boards had a greater propensity to use the courses than others, for example, LEB (11%), NORWEB (9%), EEB (7%). However, some boards, such as SEEB, SWaEB, Manweb, NEEB and NSHEB, did not use any other courses apart from Henley.[51]

The business schools used by electricity boards are shown in Table 4. In addition to Henley, with its five courses, Ashridge Management College was used most frequently.

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[51] Ibid.

Table 4

Business Schools used by Electricity Boards - 1977-1982

Business School	Times used No.	Number of Boards using No.
Ashridge (4 courses)	35	7
Henley (4 courses, excluding GMC)	23	6
Manchester Business School (4 courses)	15	3
London Business School (2 courses)	13	4
Roffey Park (3 courses)	6	2
National Coal Board Staff College	5	1
Cranfield (2 courses)	3	1
Leadership Trust	3	2
Oxford Centre/Univ. Coll. Swansea (HBS)	2	1
Scottish Business School	2	1
Sundridge Park	2	1
University of Bradford	1	1
British Transport Staff College	1	1
Inbucon (Scotland)	1	1
Inst. of Chartered Accts. Scotland	1	1
Oxford University	1	1
Total	**114**	**11**
Henley GMC	16	16

Note: The table records annual usage of courses by electricity boards. Attendance by managers was not recorded in the Register.

Source: EC, Register of External Management Courses' (1982, 1983), EC archive.

Ashridge College provided four courses and over five years the College was used at least thirty-five times by seven electricity boards. Courses at the Administrative Staff College, Henley, excluding the GMC, were used twenty-three times, mostly by the CEGB, which used Henley at least thirteen times over the five-year period. Courses at the Manchester Business School were used fifteen times by three boards, and the London Business School provided two courses that were used by four boards thirteen times.

Table 5 shows in more detail the main courses that were most frequently used by electricity boards between 1977 and 1982.

Table 5

Popular Business School Courses used by Electricity Boards - 1977-1982

Business School	Course	Times used 1977-1982 No.	Course cost 1982 £	Course length Weeks	Type of manager attending
Ashridge	Management Development Programme	21	2240	4	Mid.
Henley	General Management Course	16	6000	9	Snr.
Henley	The Senior Course	14	3150	4	Snr.
LBS	London Executive Programme	9	5700	10	Snr./Mid.
MBS	Executive Development Programme	8	5750	10	Snr.
Ashridge	Senior Managers Course	7	1935	3	Snr.
Ashridge	Young Managers	6	1750	3	Jnr.
NCB Staff Coll.	Advanced Management Programme	5	3250	6	Snr.
Henley	Trade Union View of Industrial Relations	5	630	1	Mgrs.
LBS	Business Economics Programme	4	1250	2	Econ.
Roffey Park	Management: Human Aspects 'M' Series	4	530	1	Jnr./Mid.

Source: EC, 'Register of External Management Courses' (1982), EC archive.

The Ashridge Management Development Programme was the most popular; it was used twenty-one times by six boards and lasted for four weeks. The subsequent five most commonly attended courses, held at Henley, LBS, MBS and Ashridge, were aimed at senior managers. Three of the courses were relatively long, either nine or ten weeks in length, which meant that each board had to plan for the loss of senior managers for over two months, and provided the boards with the opportunity to develop other managers in their absence. Course fees varied a little and, calculated on a weekly basis, ranged from £530-£788 per week. The Henley Senior Course at £788 a week was the most expensive, perhaps because the course extended from a preliminary meeting and a two-day review course that took place some 18-21 months after the course had been attended.

The popular Ashridge Management Development Programme was aimed at:

Managers in mid-career with about 10 years' business experience of which 5 should have been spent in a position of managerial responsibility. The course includes some overseas members. The age range is early 30s to early 40s. [52]

From 1959-1977, inclusive, the industry operated a Selection Panel at the Electricity Council (EC) for Henley College and all boards were asked to make nominations annually through the EC Selection Panel. The EC then vetted the nominations and made their selection of candidates direct to Henley College. This approach was a potential seedbed for conflict that may have required explanations as to why, for example, Yorkshire Board successfully achieved 19 places at Henley while some others, such as Manweb achieved seven places. Although boards may have put forward a number of candidates to attend Henley College, this would not be reflected in the figures unless their nominations were accepted first by the EC Selection Panel and then by Henley itself. It seems that unsuccessful candidates were likely to have found their way to the London and Manchester Business Schools. In 1976 the CEGB indicated that they wished to make direct nominations to Henley. Following consideration of their requirements by the Electricity Council's Industrial Relations Committee in 1977 it was agreed to discontinue the central selection of candidates. The boards also agreed to let the EC know of their nominees for the purpose of the briefing prior to the course at Henley, and so that Council could let boards know if too many ESI employees were going to any one GMC Henley Course. After the Henley Selection Panel had been disbanded the electricity boards did not make direct student nominations to Henley College even though they were reminded to do so by

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[52] Ibid.

the Electricity Council. The reason that they did not do so was because Henley cost too much:

> The view expressed to me by many Boards is that Henley is too expensive and the number of nominations is, therefore, likely to fall unless Council take a decision that ESI presence at General Management Courses should be maintained as a matter of policy and not only for the training of managers. [53]

Some four weeks later, when the Electricity Council reviewed the numbers of managers who were nominated by their own boards to attend Henley College, it was found that boards tended to be apathetic in their support for educating their managers:

> The evidence suggests that significantly fewer nominations are being made on the new basis than under the previous, central arrangements. The fall-off and delay in making nominations could have other causes, but the laying aside of a central procedure seems likely to be the main one. There is no evidence (unless it is forthcoming from members) that there has been a comparatory increase in support for alternative management education provision. (The Industry's own internal senior course is not designed as an alternative.) [54]

It is interesting to note that some four years' earlier, in 1974, the Electricity Council had minuted that whereas the industry had been uncertain about the College, it was providing 'fairly practical and realistic management training' compared with the newer business schools.[55]

> Members considered the role and value of the Administrative Staff College, Henley, in relation to the functioning of the Ashridge Management College and the development of various Business Schools. In the past people had had considerable doubts about the value of Henley but in recent years the College had shown a marked improvement and now provided fairly practical and realistic management training. The Business Schools on the other hand were rather orientated towards immediate post-graduate training. [56]

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[53] Internal memorandum from W. J. Prior to the EC Chairman, Sir Francis Tombs (who was appointed to the Henley College Court of Governors, in a personal capacity), 'Henley Nominations' (17 May 1978), EC archive.

[54] 'Conclusions' in attachment to Extract, Electricity Council Minutes, 203rd meeting (14 June 1978), paragraph no. 6, EC archive.

[55] EC, 'Administrative Staff College Henley', in Extract, Electricity Council Minutes, 157th Meeting (12 June 1974), X Subscriptions and Donations: Minute 143, EC archive.

[56] Ibid.

Table 6 illustrates the attitudes of electricity boards to sending managers on courses. It is based on the assumption that the proportion of managers in each Electricity Board (column 1) might be used as a guide to assess the proportions of managers sent on courses (columns 2 and 3), and the usage of external management courses (column 4). In the case of the CEGB, the board employed about half the managers in the ESI (49%) and made frequent use of Henley (32%), Ashridge (18%) and external management centres (46%) on a regular basis. Some other boards that actively sought to educate their managers included NORWEB, LEB and YEB.

Table 6

Attendance at and Usage of External Management Centres

	(1) Managers in post 1982 %	(2) Henley College 1948-1982 %	(3) Ashridge College 1966-1970 %	(4) Usage of external bodies 1977-1982 %
CEGB	49	32	18	46
EC	9	13	0	8
NORWEB	3	4	28	9
LEB	4	6	25	11
YEB	4	8	18	3
SEB	3	4	8	2
SSEB (Scotland)	not known	0	3	3
EEB	3	5	2	7
SWEB	3	4	0	6
MEB	3	6	0	3
EMEB	4	4	0	2
SEEB	5	4	0	0
Manweb	4	3	0	0
SWaEB	3	4	0	0
NEEB	3	4	0	0
Total (No.)	**1506**	**253**	**120**	**114**

Notes: Column (1) gives the proportion of managers by board in 1982.
Column (2) gives the proportion of managers by board that attended Henley College 1948-81.
Column (3) gives the proportion of managers by board that attended Ashridge College 1966-70.
Column (4) gives the usage of external colleges by board for each year 1977-1982.
Source: Column (1) EC, *Handbook of Electricity Supply Statistics* (1984), pp.102-107, table 60.
Columns (2) and (3), as Table 2 above. Column 4, as Table 4 above.

It can also be seen from the table that some organisations, such as EC, SWEB, MEB and EMEB, appeared to avoid Ashridge College but used other management education centres. Other boards, such as SEEB, Manweb, SWaEB and NEEB, seem

to have used Henley College only, which may have been due to the efforts of the Central Selection Panel.

It would appear that the preference shown for Henley rather than any other external courses was due to the efforts of the pro-active central selection panel that operated through the Electricity Council, and that some boards had no interest in educating their managers at business schools. However, perhaps another perspective that adds to the understanding of the question of support for management education can be drawn from looking at the amount the ESI has given to appeals from these institutions.

Attitude to appeals from external management education centres

With regard to contributions to appeals from these management centres, with the exception of Henley and CIME, appeals were made direct to boards and the information about them is limited to the correspondence that had been copied, or referred, to the Electricity Council. Limited information was available about appeals made direct to boards such as the odd case that was recorded or references from an Annual Report such as Ashridge. Although these references may be incomplete they span a period of some of 37 years and illustrate why some Business Schools received support whereas others did not. They also reveal that decisions were not always as objective as they might have been in an industry that depended on its engineers and their scientific approach to solving problems. Occasionally, a particular board or the Electricity Council appeared to have a more vested interest in a management education centre. This might have been because the chairman was on the board of

governors;[57] or did not care for a particular Business School, or was not a personal friend of whoever was making the appeal.[58] In general, appeals that were made through the Electricity Council met with favourable Council decisions. For example, the Henley and CIME appeals were made to the Electricity Council and put to the formal meeting of the Electricity Council for discussion by all the Council members, which included all of the industry's chairmen. Table 7 analyses the ESI's reaction to appeals from the management centres from 1961 to 1985 inclusive. It should be borne in mind that these are minimum contributions. For example, it can be seen from the table that information concerning the amounts donated to Ashridge Management College in 1970 is incomplete. In addition, it will be noted that Aston University's contribution was renewed over five years although no information regarding details of the earlier donation was found. The electricity industry gave at least £308,750 to appeals from management colleges, or on behalf of the business schools, over the twenty-five-year period. Henley College appeared to receive unquestioned support, although the industry did conduct an internal appraisal around the time that the changes took place in 1972. In response to appeals from Henley College, from 1961 to 1985 the ESI gave the College some £65,000 which formed around one-fifth of total donations. Ashridge College appeared to have been relatively well supported evidenced from the number of electricity industry managers who were sent on courses between 1977-1982. The College also received financial

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[57] In 1963 the Chairman of the LEB was a governor of Ashridge College. Two Electricity Council Chairmen were members of the Henley Court of Governors: Sir Ronald Edwards (1962 appeal) and Sir Francis Tombs (1979 appeal).

[58] In an Electricity Council internal memorandum from Mr Dobson to Mr Murphy, it was noted: 'I have spoken to Miss Langton who advised me that the Principal, Professor Ball is not a close personal friend of the Chairman although they have corresponded from time to time. I also understand that Sir Peter [Menzies] is not particularly keen on the London Business School and would not be adverse to being advised to not support this venture' (11 June 1974), paragraph 2, EC archive.

support from the boards who used the College (including the Electricity Council which did not use Ashridge), however, the size of the contributions is not known. The CEGB and Yorkshire Electricity Board gave a small proportion of the financial support, which formed around three per cent of contributions, to Bradford University. However, the bulk of the contributions, almost three quarters of the total sum and close to a quarter of a million pounds (£225,000), over the period 1964-1977, went towards the London and Manchester Business Schools. This was in response to appeals from CIME (£105,000), FME[59] (£70,000) or LBS (£50,000) for their foundation, expansion and other developments. Appeals for financial support from FME/CIME were compared with donations given by other nationalised industries and large companies such as Shell and Unilever. Indeed, in 1970, CIME had received promises of contributions totalling some £2,519,851 including the seven year contribution totalling £70,000 from the ESI (E&W),[60] which formed just three per cent of all promised contributions.[61] Contributions appeared to have been affected by the whims of some of the electricity industry's chairmen especially if they had been associated with an external management education centre, or did not hold one in high esteem. Individual boards were expected to deal with appeals based on their usage of the centres, and by direct contributions which were not recorded centrally.

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[59] CIME : Council of Industry for Management Education. FME: Foundation for Management Education.

[60] In 1970 CIME had anticipated that the ESI would contribute £100,000. CIME subsequently approached the Scottish boards and, in response, it received a promise from the SSEB of £5,000 per year over seven years which brought the ESI (GB) total contribution spread over seven years to some £105,000, EC archive.

[61] Attachment to letter from Sir Henry Jones, Chairman, Gas Council, to Sir Norman Elliott, Chairman, Electricity Council (27 May, 1970), EC archive.

Table 7

**Contributions from the Electricity Industry to Appeals from
External Management Education Centres 1961-1985**

	Year	Amount £	Donated by	Donated to	For - purpose of funds/comments
1	1961-1980	1,000 p.a.	ESI(E&W)	Henley	Annual contribution to 1980/81, (total £20,000).
2	1962	5,000 l.s.	ESI(E&W)	Henley	Modernising premises. Lump sum.
3	1963	2,000 l.s. 250 l.s. 250 l.s.	LEB YEB MEB	Ashridge " "	Chairman a governor.
4	1964	10,000 p.a.	ESI(E&W)	FME	For 7 years (total £70,000), towards foundation of London and Manchester Business Schools.
5	1966	1,000 p.a.	MEB	Aston Univ.	Renewal of contribution, for a period of 5 years (total £5,000), for purposes of specific benefit to the ESI.
6	1968	5,000 l.s.	CEGB	Bradford Univ.	Management Centre.
7	1968	5,000 l.s.	YEB	Bradford Univ.	Management Centre.
8	1970	? 250 l.s. ? 1,000 l.s. ? ? ? ?	CEGB EC LEB NORWEB SEB SEEB SWEB YEB	Ashridge " " " " " " "	Taken from Ashridge Annual Report amounts not given. In response to an appeal from Ashridge, Council decided that in view of the pattern of usage by boards, they should decide individually whether to contribute.
9	1971-1977 1971-1977	7,000 p.a. 5,000 p.a.	ESI(E&W) SSEB	CIME CIME	For expansion of London and Manchester Business Schools. (Total for seven years: £70,000; although CIME had expected £100,000. Told to approach SSEB/NSHEB.) For 7 years (total £35,000).
10	1974	5,000 l.s	ESI(E&W)	Henley	Once and for all donation to help with £80,000 mortgage repayment.
11	1975	Regret	ESI(E&W)	LBS	Institute of Public Sector Management (EC Chairman not keen on LBS).
12	1979	2,000 p.a.	ESI(E&W)	Henley	For 5 years (total £10,000), Centre for Employment Policies, (EC Chairman member Henley Court of Governors).
13	1979	5,000 p.a.	ESI(E&W)	LBS	For 7 years for major development to premises (total: £35,000).
14	1983	Regret	EC Chairman	CIME	Seeking £2m. from industry over 5 years.
15	1985	25,000 l.s.	ESI(E&W)	Henley	Once and for all payment.
16	1985	5,000 p.a.	ESI(E&W)	LBS	For 3 years for current development (total £15,000).
	Total	£308,750			

p.a. = per annum. l.s. = lump sum; ? = means the amount of contribution is not known.
Note: The sources and notes to this table are recorded below.

Sources and Notes to Table 7:

1	Extract from Minutes of 32nd Meeting of the Electricity Council, held on 10.5.1961. Also recorded in Electricity Council paper No. 3694 dated 21.2.1985, paragraphs 2 and 4.
2	Extract from Minutes of 42nd Meeting of the Electricity Council, held on 14.11.1962. Also recorded in Electricity Council paper No. 3694 dated 21.2.1985, paragraphs 2 and 4. EC chairman, Sir Ronald Edwards, was a member of the Court of Governors.
3	Letter from LEB Secretary to Deputy Secretary, Electricity Council dated 11.12.1963; Letter from YEB Secretary to Dep. Secretary, Electricity Council, dated 17.12.1963. Also in manuscript file note headed Ashridge Management College, dated 2.4.1970. Ref. S13/113; and Electricity Council paper no. 1438, dated 20.5.1970 headed Ashridge Management College Appeal. The LEB chairman was a governor.
4	In a briefing note for Mr Wedgwood for the Electricity Council Meeting held on 20.5.1970.
5	Manuscript file note headed Ashridge Management College, dated 2.4.1970. Ref. S13/113.
6	Manuscript file note headed Ashridge Management College, dated 2.4.1970. Ref. S13/113.
7	Manuscript file note headed Ashridge Management College, dated 2.4.1970. Ref. S13/113.
8	Extract from Minutes of 111th Meeting of the Electricity Council, held on 20.5.1970. Also, Internal memo from J Wedgwood to N F Marsh dated 7.7.1970.
9	Extract from Minutes of 110th Meeting of the Electricity Council, held on 8/9th April 1970.
10	Extract from Minutes of 157th Meeting of the Electricity Council, held on 12.6.1974. Also recorded in Electricity Council paper No. 3694 dated 21.2.1985, paragraphs 2 and 4.
11	Electricity Council internal memo from Mr Dobson to Mr Murphy dated 11.6.1974.
12	Extract from Minutes of 211th Meeting of the Electricity Council, held on 14.3.1979. Also recorded in Electricity Council paper No. 3694 dated 21.2.1985, paragraphs 2 and 4.
13	Extract from Minutes of 211th Meeting of the Electricity Council, held on 14.3.1979. Also recorded in Electricity Council paper No. 3694 dated 21.2.1985, paragraphs 2 and 4. Sir Francis Tombs, EC chairman, was a member of Henley Court of Governors.
14	Letter from P Jones, EC chairman to Sir D Ezra, CIME, dated 1.9.1983.
15	Extract from Minutes of 281st Meeting of the Electricity Council, held on 21.2.1985.
16	Extract from Minutes of 281st Meeting of the Electricity Council, held on 21.2.1985.

Note: All sources are from the EC archive

Summary

In the section on the background to management education 1950-1987, it was shown

that British industry lagged behind the USA, Japan, France and Germany despite

government initiatives to advocate and promote support for training managers. In the

electricity industry the definition of a 'manager' depended on a hierarchical position

and resulted in a ratio of one manager to at least 104 employees. In fact, there were

thousands of supervisors over the industrial, engineering and clerical and

administrative employees many of whom, in private industry, would have been

classed as managers and who were reclassified as managers when the industry was

privatised. However, the issue of 'supervisors' or 'managers' does not obscure the

aim of this thesis, which concentrates on the development and succession of managers and, by implication, the supervisory positions that they occupied along their career paths. It is, however, important from the perspective of identifying supervisors for training and development, and whereas private industry used the government sponsored 'Training Within Industry' Scheme it was not as well supported by the nationalised industries. In the ESI it was almost twenty years after nationalisation that supervisors were identified and their roles defined for training purposes.

The development of managers was dependent on the electricity boards themselves following nationalisation, a time when little was done or said about the subject in industry generally. Some ESI managers were sent on short courses when it was found necessary to do so to meet special needs such as training power station managers; and some managers attended courses at the only management training college in operation from 1947, namely, the Administrative Staff College at Henley. It was also shown that before 1962, the electricity industry had used Henley College more than the other nationalised industries and that the first ESI management students were sent on courses as early as 1948. For some twenty years from 1957-1977, a Central Selection Panel organised the electricity industry's nominations for managers to attend the Henley College courses but when the Central Panel was disbanded and its pro-active ministrations ceased, nominations from boards fell. This appeared to be the case in relation to the records of attendance at other business schools: some electricity boards sent more managers on courses and some did not

send any at all, except those that went to Henley when the Central Selection Panel was in operation.

Another way in which the electricity industry's attitude to management education and the business schools was measured was by investigating the amount of financial support that the industry gave to the management education centres. The electricity boards themselves had the option to send their own donations direct to the body that made the appeal, and some presumably did so. However, in the case of the boards that did not send any managers on external courses, it is unlikely that these electricity boards would have supported the business schools or colleges financially. Over the period from 1961-1985 the ESI donated at least £308,750 to various appeals. Three-quarters of this sum went towards the formation, expansion and development of the London and Manchester Business Schools. Henley College received over twenty per cent of total contributions; the balance of the remaining contributions was made up of donations that were awarded to Ashridge College, Aston and Bradford Universities. It was also shown that financial support for appeals depended on the chairmen of the boards. Four instances were found that illustrated the influence of four chairmen. Three chairmen were governors of either Henley or Ashridge Colleges and these colleges were given financial support. In the fourth instance an appeal was rejected and it was noted that the chairman was not keen on the business school that made the appeal.

The impetus for setting the standards for management training within the ESI originated from a government initiative, the Industrial Training Act in 1964. The

effect of this legislation led to the formation of an industry wide training board for the electricity industry itself, the Electricity Supply Industry Training Board (ESITB), which produced a Recommendation on Management Training and Development.

It has been shown that for some twenty years after nationalisation management education in the electricity industry was disorganised and depended on the ad hoc arrangements made by individual boards, but this attitude towards management education was widespread until the Industrial Training Act. It was as a result of government legislation that the electricity industry set up its own ESITB and subsequently produced a standard, a Recommendation, for training and developing managers. Managers had been trained at Henley Management College since the College was established but when the Central Selection Panel was disbanded some boards appeared to abandon the concept of training managers entirely. Some electricity boards, though, had clearly established procedures for training managers. This is judged from the numbers that attended training courses, the use made of business schools and the financial support that they gave to them. However, other electricity boards did not appear to have such procedures in place and if it were not for government legislation or encouragement from the Central Selection Panel it might be presumed that some boards would not have sent any of their managers on external courses. It would appear therefore that on the surface the attitude of the ESI as a whole to external business schools was positive, whereas if each board is reviewed separately, the attitude was dependent on each board, its chairman and its policy on the training of managers.

The next chapter investigates the products of two of the industry's attempts to educate its senior managers by sending them on external and internal management courses.

Chapter 5. The Apparent Effect of Management Courses on Management Succession in the Electricity Industry

The previous chapter reviewed the electricity industry's attitude to training managers and the use of business schools to train them. This chapter examines two management development courses for senior managers. One is an external course, the General Management Course (GMC), held at the Administrative Staff College, Henley. The other is the internal ESI Senior Managers' Course (SMC). The focus of this chapter is on the progression of the managers who attended the two courses. Managers who attended external courses mixed with people from other organisations and industries and, by implication, the educative effect was greater than it was for managers who attended an ESI internal course. On the ESI course managers mixed with their peers from other parts of the industry, from different functions and areas of expertise. However, although this had a broadening effect, it was introspective. The Henley course took managers away from their posts for over two months and cost £6,000 for each place in 1982.[1] The internal SMC lasted for three weeks and cost in the region of £1,000-£1,500.[2] It might be assumed therefore that the Henley Management Course was more of a Rolls Royce vehicle for a select group of managers than the internal course. The profiles of the Henley and SMC managers will be examined and by making comparisons between them, it may be possible to identify factors that led to the progression of some of them to the highest levels

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[1] EC, 'Register of External Management Courses' (April 1982), EC archive.
[2] EC, 'Horsley Towers Staff College, Review of Present and Future Role', Volume 2 Appendices (July 1980), Appendix M, EC archive.

within the electricity industry, to top management[3] positions. In an attempt to identify if there were distinct differences between the two groups of managers, their educational and professional qualifications, job functions, nominating boards and other background characteristics, are examined. The final test will be to compare the career progression of the Henley and SMC managers. From these two measures it may be possible to determine the effect of the courses in the development of managers and their careers.

It will be recalled from Chapter 1 that females generally were excluded from technical apprenticeships and other training schemes because they did not have the qualifications required to enter engineering or science based occupations. It will be shown in Chapter 10 that practical workshop training was not available for females. These points should be borne in mind during the following investigation because almost two-thirds (64%) of the Henley and almost three-quarters (72%) of the SMC group of managers had a technical background. They had begun their careers by studying for technical qualifications supported by practical workshop training.

The chapter begins with a summary of each course and then makes comparisons between the courses and the managers.

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[3] The core top management team in each Area Board comprised the full-time chairman, deputy chairman and at least four chief officers who headed their own departments: chief engineer, chief commercial officer, chief accountant and board secretary. In the CEGB in addition to the full time chairman and deputy chairman there were full time board members. The Electricity Council's top management comprised full time members and directors. See for example Electrical Times, *Electricity Supply Handbook 1986* (39th ed. 1985).

External development at the Administrative Staff College (ASC) at Henley[4]

Over two hundred ESI 'threshold' senior managers attended the General Management Course at Henley between 1948 and 1982, an average of seven ESI managers a year.[5] This means that less than a half of one per cent of the total managers employed in the ESI were selected for development at Henley. From 1959 electricity boards submitted the names of their proposed ASC candidates to the Central Selection Panel at the Electricity Council. This selection panel vetted candidates and subsequently, if they were approved as suitable nominations, Henley itself vetted them. Ninety (41%) of the ESI managers who attended the GMC became top managers. Those who attended Henley before 1970, a period during which Britain had given little attention to management development and Henley had no competition, were marginally more likely to become top managers (44%) than those who attended after 1970 (39%).

Internal development on the Senior Managers' Course (SMC)[6]

The SMC was for practising senior managers[7] from different functions and locations within the ESI. There were two courses a year over ten years. Each course lasted for three weeks and offered places for up to twenty-one members. The SMC aimed to ensure that managers had a broad view of the industry at national level and did not become too introverted about their locations. Managers were informed of the latest

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[4] Details from ASC, Henley files held in Electricity Council's Registry Section. In addition, I found further biographical information from searching through numerous annual editions of the *Electrical Who's Who,* and numerous annual editions of the *Electricity Supply Handbook.*

[5] That is to say. out of some 1,773 managers employed in the ESI in 1969 - this date is used because it is the mid-point during the years when managers from the ESI attended the GMC.

[6] Documents provided by the Electricity Council's training establishment at Horsley Towers.

[7] For example, Station Managers, District Managers and others of comparable seniority from Area, Division, Group, Region and Headquarters units, including as Assistant Chief Officers in specialised functions.

industry policies and invited to examine the influence of Government and other changes; as well as considering managerial issues that included their own and each other's roles and responsibilities. During the three-week period of the course managers spent one week at the industry's training centre at Horsley Towers, one week with the CEGB and one week in an Area Board.[8] Although the course was introspective, it provided an established period during which senior managers of different ages and levels of experience could mix and socialise. In addition it provided an opportunity for managers to meet, associate with and, perhaps, impress the top managers from the industry who gave talks to SMC members. The course thus facilitated and perpetuated the management network and assisted with the smooth operations of the industry's business. During the ten year period 1977 and 1986, the course was attended by just under 400 senior managers from all parts of the ESI.

Comparisons between the two courses and groups of managers

This section analyses the characteristics of the managers who attended Henley, in parallel with a similar examination of the practising senior managers who joined their peers on the SMC. The differences between the two groups of managers are examined in an effort to identify distinctions between those who became the 'high fliers' and those who were established and, perhaps, on a plateau in their careers. The most important difference between the two groups is that 90 (41%) of the Henley group progressed to top management positions, compared with just 24 (6%) of the SMC group. The exploration that follows attempts to make comparisons

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[8] EC, 'Horsley Towers Course Brochure 1984-85', p 8, EC archive.

between the two groups of managers by analysing different identifiable factors that may have contributed to the career progression of some groups at the expense of others. The investigation begins by contrasting the differences between the two management development courses, and then analyses the differences between the managers themselves.

Differences between the two management development courses

Both courses applied to practising senior managers. Fundamental differences concern the time period in which managers attended each of the courses. Some 217 managers attended the GMC, Henley, over the period 1948-1982, except for a four-year interval from 1967-1970 inclusive. This compares with the larger number (388) of senior managers who attended the internal SMC and who were released over a much shorter, and more recent, ten year period from 1977-1986. The Henley managers mixed with managers from external organisations who were at similar levels of management as themselves. The SMC managers, on the other hand, were brought together from different parts of the electricity industry. The Henley course took managers away from the workplace for some two months and cost around £6,000. for each place in 1982. The duration of the SMC was less than half that time, lasting for three weeks and cost between £1,000 and £1,500 in 1980. Although the costs are similar, the use of deputies with the purpose of testing them and their potential as management successors could have overcome the cost of depriving each organisation of a manager for several weeks. Another distinction concerns the selection process for each course. The nomination and acceptance of the Henley managers comprised a number of stages. First, the names of the candidates were sent

by their employing organisations to the Central Selection Panel at the Electricity Council and, if the managers were considered to be suitable, their names were forwarded to Henley College for approval. The selection and acceptance of senior managers to the SMC was a simple matter of nomination by the employing organisation and acceptance on a particular course. A number of places were available for ESI managers on each course and, to ensure places were filled, the course administration was undertaken by the Electricity Council. Otherwise, unless the employing boards were pro-active in developing their managers, fewer managers would have been trained. In addition, Henley arranged briefing meetings with managers, before and after their courses, a facility that was not arranged for SMC managers.

The remainder of this section examines the differences between the types of senior managers who attended the Henley course or the SMC.

Differences between the two groups of senior managers

At each stage of the investigation that follows, where possible, reference will be made to those who became top managers in order to identify any special features that distinguished them from those who did not become top managers. The trail of the investigation begins with an analysis in section (i) of the nominating boards,[9] and

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[9] The word Board is used throughout and includes, unless otherwise stated, the 14 Area Electricity Boards, the CEGB and the Electricity Council. Reference to the CEGB before 1958 includes the BEA Divisions; and reference to the Electricity Council before 1957 includes the BEA, CEA and Authority HQ.

then compares the differences between the managers themselves. These are analysed in the remaining sections and include (ii) technical and functional influences, (iii) their age structure, (iv) higher educational qualifications, (v) membership of professional bodies, and, (vi) their career progression. The investigation in each section begins by analysing the differences between all course managers and then compares those who progressed to top management positions.

(i) Nominating boards

Differences between all course managers

Although there was little difference between the total number of managers employed by the CEGB (48%) and the Area Boards (44%), the proportion of managers who were nominated to attend the two courses was quite different. It can be seen from Table 1 that the Area Boards produced around two-thirds (65%) of the SMC candidates, as well as over half (55%) of those who attended Henley. The CEGB sent around three in ten managers both to Henley (32%) and the SMC (30%).

Differences between those who became top managers

It is relatively easy to understand why those who attended Henley may have been regarded as 'high fliers' or 'crown princes'. Proportionately more of these managers reached top management positions (41%) than the much smaller group of SMC managers (6%). The role of the employing boards in producing top managers is set out in Table 1. It can be seen that as a proportion of those from the Electricity Council, over half of the Henley group (54%) progressed to top management. This

contrasts with around four in ten from both the Area Boards (41%) and CEGB (37%).

<u>Table 1</u>

ESI organisations that nominated managers to Henley and the SMC

Total Managers	AEB		CEGB		EC		Total	
	No.	%	No.	%	No.	%	No.	%
GMC, Henley, Total	119	55	70	32	28	13	217	100%
SMC Total	252	65	115	30	21	5	388	100%
Top Managers								
GMC, Henley	49	41	26	37	15	54	90	41
SMC	18	7	5	4	1	5	24	6
Total managers employed (1981) ①	739	44%	813	48%	127	8%	1679	100%

<u>Note:</u> The total of 252 Area Board SMC managers includes: 219 (87%) from the England and Wales boards, 32 (13%) from the two Scottish boards and one (representing less than 0.5% of the total) from Northern Ireland. ① These figures are for England and Wales.
<u>Source:</u> EC, *Handbook of Electricity Supply Statistics, 1985,* Table 60.

The fact that just 24 (6%) of the 388 SMC managers progressed to top management positions suggests that this was not a source of potential top management material. The CEGB may have seen little benefit in this internal course, especially when compared with its use of other external courses (see Chapter 4, Tables 3 and 6). The benefits of attending the SMC, however, would have included the cross-fertilisation of managers within the ESI, sharing industry-wide problems and empathising with their peers.

Differences between all course managers: Area Boards

Some two-fifths (41%) of Henley Area Board managers and comparatively few of SMC Area Board managers (7%) became top managers. However, the combined totals obscure the differences between the Area Boards themselves in relation to the number of managers who attended the courses, and the number who became top managers. The number of Henley managers sent by each Area Board, ranged from

three managers nominated by EMEB (2% of all managers) to eighteen from YEB

(15%). SMC candidates ranged from fifteen managers sent by NORWEB (6%) to

the maximum of twenty from SWEB, Manweb, SWaEB and LEB (8% each). The

boards were entitled to nominate two managers to attend separately one of the two

Senior Managers' Courses each year. However, it can be seen from Table 2 that not

all of them achieved their quota.

Table 2

GMC Henley 1948-1982 and SMC 1977-1986
Area Board Candidates

| | GMC Henley | | | | Senior Managers Course | | | |
| | Top Manager | | Total | | Top Manager | | Total | |
Area Boards	No.	%	No.	%	No.	%	No.	%
SWEB	5	71	7	6	1	5	20	8
Manweb	4	57	7	6	1	5	20	8
SWaEB	5	56	9	8	1	5	20	8
SEEBOARD	4	50	8	7	0	0	18	7
EEB	5	45	11	9	1	6	16	6
NEEB	4	44	9	8	4	21	19	8
MEB	6	43	14	12	2	12	17	7
SEB	4	40	10	8	0	0	17	7
NORWEB	3	33	9	8	0	0	15	6
EMEB	1	33	3	2	1	6	18	7
YEB	5	28	18	15	1	5	19	8
LEB	3	23	13	11	4	20	20	8
NSHEB	0	0	0	0	2	13	16	6
SSEB	0	0	1	1	0	0	16	6
Total Managers	**49**	**41%**	**119**	**55%**	**18**	**7%**	**251**	**65%**

Note: The percentage figure for those who became top managers is calculated for each board from the number who became top managers and the total sent on each course.

Differences between those who became top managers: Area Boards

Boards that sent the most managers to Henley did not produce the most top

managers. For example, Yorkshire (YEB) sent eighteen managers and five of them

(28%) became top managers. The four boards that produced the greatest number of

top managers, as a proportion of their total nominations, were SWEB (this board sent

seven managers and five of them (71%) became top managers), Manweb (57%),

SWaEB (56%) and SEEBOARD (50%). Of the SMC managers who subsequently

reached top management positions, a third (8) were nominated by NEEB and LEB (who each sent 4 delegates), representing one-fifth (21% and 20% respectively) of each board's nominations. Although some boards appear to have been more successful in producing top managers than others, interpretation of these results must be treated with caution because of the small numbers used in Table 2.

There could be a variety of reasons for the number of low nominations and for the higher success rate in producing top managers. In the case of low nominations, for example, it may have been the chairman's preference for other business schools (discussed in Chapter 4). There may have been insufficient managers available. There was also the expense of training managers. With regard to the appointment of top managers, it may have been that boards were particularly successful in selecting talented managers, although the talent, presumably, had to be available in the first place. Perhaps the future top managers possessed characteristics peculiar to top managers. On the other hand, there may have been other factors that were relevant such as the influence of chairmen and the government in making appointments. Or there may have been other factors at play.[10]

It should also be noted, that comparisons with those who eventually became the top managers within the CEGB and the Area Boards are difficult to make because of the number and structure of the separate organisations. In England and Wales, there

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[10] S. Knight, *The Brotherhood. The Secret World of the Freemasons* (1989), p.136. Mr Knight wrote 'The nationalized industries are rife with Freemasonry, especially the British Steel Corporation, the National Coal Board, British Rail, the Post Office, the regional gas and Electricity Boards and the Central Electricity Generating Board, the Atomic Energy Authority and London Transport.' Some staff in boards referred to the power of the "funny handshake brigade" on certain occasions. If this was a factor it would, of course, have had implications for the promotion of females to top posts.

were twelve Area Electricity Boards and one generating board. In each of the twelve Area Boards there was a chairman, deputy chairman and at least four other top managers and each board was autonomous. The CEGB, on the other hand, had one chairman and its own top management structure. In 1978 the total number of managers employed by the Area Boards (756) was slightly less than those working for the CEGB (793). The Area Boards combined workforce comprised some 96,726 (61%) employees, compared with some 60,691 (39%) working for the CEGB. The ratio of managers to employees was higher in the Area Boards (one manager to every 128 employees) than in the CEGB (one manager to 77 employees). There were more engineers in the CEGB but fewer clerical employees compared with the Area Boards. The Area Boards comprised headquarters and districts, areas or divisions, each with its own structure, which compared with the management structure in the CEGB's power stations.

(ii) Technical and functional influences

Under this heading, the function of the managers is explored to find if their chosen area of expertise may have influenced their career progression to top posts. First of all the technical nature of their backgrounds and then their specific job functions are examined.

Two-thirds of the GMC Henley (64%) and SMC (63%) managers shared similar technical backgrounds, which is reflected in the proportion of those who became top managers among the Henley (60%) and SMC (63%) managers, shown in Table 3.

Table 3

GMC Henley 1948-1982 and SMC 1977-1986
Technical and Non-Technical Managers

	GMC Henley				Senior Managers Course			
	Top Managers		Total Managers		Top Managers		Total Managers	
	No.	%	No.	%	No.	%	No.	%
Technical	54	60	138	64	15	63	278	63
Non-Technical	36	40	79	36	9	38	110	37
Total	**90**	**41%**	**217**	**100%**	**24**	**6%**	**388**	**100%**

Note: The total percentage for top managers is calculated from the number who became top managers and the total managers on each course.

Henley managers

Table 4 analyses the Henley managers into technical and non-technical groups and those who became, or did not become, top managers, during the two periods 1948-66 and 1971-82.[11]

Henley managers with technical backgrounds

Before 1967, the majority (71%) of this group had a technical background compared with just over half (56%) 1971-1982 period. Before 1967 around four in ten (37%) became top managers compared with a similar proportion (41%) after 1970.

Henley managers with non-technical backgrounds

The proportion of non-technical managers who attended the GMC before 1967 was smaller (29%) than in the later period (44%). However, the proportion who became top managers before 1967 (60%) was greater than after 1970 (37%).

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[11] These periods have been chosen because there was an interval from 1967 to 1970 inclusive when the electricity industry did not send any managers to Henley GMC.

Table 4

GMC Henley - 1948-82
Technical and Non-Technical Managers

Group	1948-1966 No.	1948-1966 % of group	1971-1982 No.	1971-1982 %, of group	1948-82 No.	1948-82 % of group
Technical						
Top Manager	28	37	26	41	54	39
Not Top Manager	47	63	37	59	84	61
Sub-total	**75**	**71**	**63**	**56**	**138**	**63**
Non-Technical						
Top Manager	18	60	18	37	36	46
Not Top Manager	12	40	31	63	43	54
Sub-total	**30**	**29**	**49**	**44**	**79**	**36**
Total	**105**	**48%**	**112**	**52%**	**217**	**100%**

Differences between all course managers

It can be seen from Table 5 that the majority of technical managers on each course were engineers or district managers while those with non-technical backgrounds worked mainly in accountancy or secretarial occupations. Information Technology and computing were relatively new technological fields and it can be seen that none of the Henley managers had specialised in these subject areas, although the industry had training courses for computer trainees from the 1960s.[12]

Table 5 also shows a group of managers who have been classified as 'hybrid'. This means that they were technically qualified managers who worked in typically non-technical occupations. None of the Henley managers were 'hybrids'. Among the SMC group, some of the managers with a technical background were promoted to jobs that usually required non-technical expertise. These managers include, for example, a board secretary and a personnel director who had technical backgrounds. The importance of the hybrid appointments is that top level jobs were limited in their

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[12] EC, 'Annual Report of Education and Training' (1970), p.14, Table IX, EC archive.

availability and, secondly, the opportunity for a similar transfer to a technical top

management position was not possible, at the time, for a manager without technical

qualifications. Therefore, the opportunities for non-technical managers to progress

were reduced by such appointments.

Table 5

GMC Henley 1948-1982 and SMC 1977-1986
Job function at time of course

Job Function	GMC Henley				Senior Managers Course			
	Top Managers		Total Managers		Top Managers		Total Managers	
	No.	%	No.	%	No.	%	No.	%
Technical								
Commercial	13	76	17	8	3	6	48	12
Engineering	26	41	64	29	4	5	73	19
District Managers	6	25	24	11	1	1	68	18
Station Mgrs. & Deputies	3	20	15	7	4	9	52	13
Research	1	100	1	*	0	0	6	1
Transmission	0	0	0	0	0	0	12	3
Hybrid Group①	0	0	0	0	0	0	12	3
Other job	2	66	3	1	3	23	7	2
No details	3	21	14	6	0	0	0	0
Sub-total	**54**	**39**	**138**	**64**	**15**	**6**	**278**	**72**
Non-Technical								
Accounting	17	61	28	13	5	13	38	10
Secretarial	11	55	20	9	3	9	33	9
Personnel	4	29	14	6	1	6	20	5
IT/Computing	0	0	0	0	0	0	8	2
Customer Service	0	0	0	0	0	0	6	2
District/Area Managers②	0	0	0	0	0	0	3	*
Other job	4	37	9	4	0	0	2	*
No details	0	0	8	4	0	0	0	0
Sub-total	**36**	**46**	**79**	**36**	**9**	**6**	**110**	**28**
Total managers	**90**	**41%**	**217**	**100%**	**24**	**6%**	**388**	**100%**

Notes: Percentages sum across columns, except in final column. Percentages may not sum to 100% due to rounding. Percentages for Top Managers are shown as a proportion of managers in each job function. Percentages for Total Managers are shown as a proportion of the Total Managers.
① The Hybrid Group is made up managers with technical qualifications who were in those jobs that were typically classified as non-technical: Personnel (5) and Manpower Services (2); Customer Services (3); Secretarial (1); Information Technology/Computers (1 who became a top manager).
② With professional accounting qualifications.

Differences between those who became top managers

In view of the small proportion of managers who became top managers, it is

necessary to express caution in any interpretation of these results. With this warning

in mind, it can be seen from Table 5 that the Henley Commercial managers (76%)

were proportionately the most successful in rising to top management positions.

There were too few SMC managers to make any real distinction but, as a proportion

of their group, the highest were the Station Superintendents and their Deputies (9%).

Among the Henley non-technical managers, relatively higher proportions of those

from accounting (61%) and secretarial (55%) fields became top managers. Again,

SMC managers were small in number but as a proportion of their groups, top

managers came from the accounting (13%) and secretarial (9%) fields.

District managers and higher managerial positions

Lord Herbert had recommended[13] that the post of district manager should be used to

provide the development for future top managers (the equivalent in the generating

board was the power station manager).

> *The District Manager posts should be a training and testing ground for higher*
> *managerial posts throughout the industry. Before nationalisation, a promising man*
> *could secure appointment as Manager to some quite small undertaking and prove*
> *himself at a reasonably early age in a job where he had full managerial control. He*
> *thus acquired in the best possible way the necessary experience to fit himself for a*
> *bigger job.* [14]

Some twenty-four district managers and fifteen power station managers attended the

GMC at Henley. Six of the district managers and three of the power station

managers became top managers but their promotion to top management positions

occurred mainly during the ten-year period following Lord Herbert's

pronouncements, before 1967. The Henley district managers were more successful

in reaching top management than their SMC peers. It can be seen from Table 5, that

of the group of 68 SMC Area Board district managers, just one (1%) became a top

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[13] Herbert Report (1956), p.76, paragraph 288.
[14] Ibid.

manager. Their counterparts from the generating board, the power station managers, achieved slightly better progression with four (8%) out of 52 reaching higher management positions. Indeed, the professional secretary and qualified accountant were more successful in achieving top management positions in the electricity industry than power station or district managers. It may be, of course, that a district manager did not want further promotion. He was the manager of his own empire which may have been preferable to a head office environment. In addition, in some districts or divisions he was on a salary that was higher than the deputy chief officer,[15] so that the differential was not an incentive, nor, presumably, was the added responsibility.

(iii) Age structure

Because of the limited amount of age related data that I found for the Henley managers, the statistics for this group refer to some seventy-nine of the one hundred and five Henley managers who attended the GMC during the period 1948-1966. The ages for the SMC group are relatively well covered for 369 of the 388 managers. Table 6 shows the age profile of those who did, or did not, become top managers.

Differences between all course managers

The Henley managers were younger than their SMC counterparts. Most (69%) of the Henley managers were aged below forty-five, compared with one-third (35%) of SMC managers. None of the Henley managers were fifty or over, compared with one-third (36%) of SMC managers who were in this age group.

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[15] EC, 'NJM, Record of Posts and Salary Scales' (28th Edition, 1 May 1985), EC archive.

Differences between those who became top managers

The Henley managers who progressed to top management positions were younger than those on the SMC. In the period under observation, some forty-six Henley managers progressed to top positions and the majority of them were under forty-five.

Almost two-thirds (63%) of the SMC managers who went on to become top managers were aged under forty-five which, if the numbers were not so small, may have suggested that younger managers with potential were being mixed with older managers to broaden their perspective. The younger managers perhaps had the potential to be high flyers while the older managers may have reached their peak. Conversely, it may have been an objective to stimulate the older managers on the course by ensuring they mixed with younger managers.

Table 6

GMC Henley 1948-1966 and SMC 1977-1986
Age Structure

Age group	GMC Henley Technical TM %	Technical Not TM %	Non-Tech. TM %	Non-Tech. Not TM %	Senior Managers Course Technical TM %	Technical Not TM %	Non-Tech. TM %	Non-Tech. Not TM %
less than 35	0	1	0	0	0	1	*	1
35-39	7	11	6	1	1	4	*	5
40-44	13	12	10	8	2	11	*	8
45-49	2	4	1	0	1	20	1	6
50+	0	0	0	0	0	29	*	6
Not known	4	15	2	4	0	4	0	1
Sub total (%)	26	44	18	12	4	68	2	26
Combined Total	70%		30%		72%		28%	
Sub-total (No.)	27	46	19	13	15	263	9	101
Combined Total (No.)	73		32		278		110	

Note: Percentages are calculated on the total number of managers on each course. Percentage columns may not sum to the total shown due to rounding. * Means that the figure is 0.5% or less.

(iv) Higher educational qualifications: first degrees

Differences between all course managers

Table 7 shows the number of managers who held a first degree, analysed into technical and non-technical groups, and by those who became top managers. It can be seen from the table that a greater proportion of the GMC Henley managers held first degrees (43%) than the SMC (31%) managers. Degrees held by the Henley group were more common among technical (28%) than non-technical (16%) managers. Degrees held by SMC managers followed a similar pattern among those with technical (22%) or non-technical (9%) backgrounds. It is likely that those who did not possess a degree were members of the professions, and this aspect will be examined later in this chapter.

Differences between those who became top managers

Of the Henley managers who progressed to top management positions, over half (52%) held first degrees compared with fifteen (62%) from the SMC group. The bias towards first degrees among technical managers was stronger among the SMC (46%) than among the Henley (31%) group of managers.

Table 7

GMC Henley 1948-1982 and SMC 1977-1986
First Degrees

| | GMC Henley | | | | Senior Managers Course | | | |
| | Top managers | | Total managers | | Top managers | | Total managers | |
	No.	%	No.	%	No.	%	No.	%
Technical								
First degree	28	31	60	28	11	46	86	22
Non-Technical								
First degree	19	21	34	16	4	17	33	9
Sub-total	*47*	*52*	*94*	*43*	*15*	*62*	*119*	*31*
No degree/not known	43	48	123	57	9	37	269	69
Total	**90**	**41%**	**217**	**100%**	**24**	**6%**	**388**	**100%**

Note: Percentages for total managers may not sum to 100% due to rounding.

Higher educational qualifications: higher degrees:

Differences between all course managers

Table 8 shows that higher degrees were held by a small number of managers. Some twenty-three (10%) of all Henley managers held higher degrees, compared with some twenty-eight (7%) of all SMC managers. Among the Henley managers there was little difference between managers with a technical background (11) and those with a non-technical (12) background, who held higher degrees. Among SMC managers, some eighteen (64%) of the twenty-eight holding a higher degree had a technical background.

Table 8

GMC Henley 1948-1982 and SMC 1977-1986
Higher Degrees

	GMC Henley			Senior Managers Course		
	TM No.	Not TM No.	Total No.	TM No.	Not TM No.	Total No.
Higher Degree						
Technical	3	8	11	7	11	18
Non-Technical	8	4	12	1	9	10
Sub-total	11	12	23	8	20	28
No higher degree						
Technical	51	76	127	8	251	259
Non-Technical	28	39	67	8	93	101
Sub-total	79	115	194	16	344	360
Total students	90	127	217	24	364	388

Differences between those who became top managers

Eleven (48%) of the twenty-three higher degrees were held by those Henley managers who progressed to top management positions, compared with eight (28%) of the SMC managers. The main difference between the two groups of managers is that eight (73%) of the eleven GMC Henley future top managers with higher degrees had non-technical backgrounds, while seven (87%) of the eight SMC future top managers had technical backgrounds. The fact that one-third of the SMC group with

higher degrees progressed to top management suggests that a higher degree may
have contributed to the qualifications required for top management progression via
this route.

Differences between all course managers: type of higher degree

It can be seen from Table 9 that among the Henley managers the type of higher
degree most frequently held was either an MA (held by twelve managers) or
doctorate (held by ten managers). Among the SMC group the PhD (held by twelve
managers) was more common than the MA (held by eight managers).

Table 9

GMC Henley 1948-1982 and SMC 1977-1986
Higher Degrees - Type of Higher Degree

Type of background	GMC Henley			Senior Managers Course		
	TM No.	Not TM No.	Total No.	TM No.	Not TM No.	Total No.
Technical						
PhD/DPhil	2	4	6	3	7	10
DSc	1	0	1	0	0	0
Dr. Ing.	0	1	1	0	0	0
MSE	0	1	1	0	0	0
MSc	0	1	1	2	4	6
MA	1	3	4	0	0	0
MBA	0	0	0	2	1	3
Sub-total	4	10	14	7	12	19
Non-Technical						
PhD	2	0	2	0	2	2
MPhil	1	0	1	0	0	0
MSc	1	0	1	0	0	0
MA	4	4	8	1	7	8
Sub-total	8	4	12	1	9	10
Total Higher Degree	12	14	26	8	21	29
Total Managers	11	12	23	8	20	28

Differences between those who became top managers: type of higher degree

Among those who became top managers, the Henley group held five PhDs and five
MAs compared with the SMC group's three PhDs and one MA. Although any
interpretation of such small numbers must be treated with caution, it can be seen that

both of the SMC managers, with technical backgrounds, who possessed an MBA, progressed to top management positions. This compares with just three of the twelve who held a PhD, two of the six with an MSc and one of the seven with an MA.

It is relevant to point out that although the Henley higher degrees were possessed by eleven of those who were promoted to top management positions, none of the higher degrees were held by those who became chairmen, deputy chairmen, chief engineers, chief commercial officers or chief accountants. They were held by three secretaries (each with an MA), and the remainder were held by those top managers whose job titles described other practical demands, including personnel, industrial relations, financial, operations, customer service, information technology and managing a group.

(v)   Membership of professional institutions

Differences between all course managers

It is apparent from Table 10, that some managers were members of more than one professional body. Membership of the professions followed a similar profile among Henley and SMC managers. The majority of both groups were members of the engineering profession (Henley 44%; SMC 41%), followed by membership of accountancy institutions (Henley 11%; SMC 10%); secretarial bodies (Henley 8%; SMC 5%) and personnel management (Henley 2%; SMC 3%). Membership of the British Institute of Management was marginally higher among the SMC (30%) than the Henley (25%) group of managers.

Table 10

GMC Henley 1948-1982 and SMC 1977-1986
The Professions: Membership of Institutions

Type of Institution/ Professional Body	GMC Henley				Senior Managers Course			
	Top Managers		Total Managers		Top Managers		Total Managers	
	No.	%	No.	%	No.	%	No.	%
Engineering	53	43	122	44	8	4	202	41
Management (BIM)	34	49	69	25	4	3	145	30
Accountancy	19	66	29	11	6	12	49	10
Secretary	12	55	22	8	2	9	22	5
Personnel (IPM)	1	20	5	2	1	8	13	3
Other Professional Body								
Technical	6	32	19	7	4	10	40	8
Non-Technical	3	33	9	3	1	6	17	3
Total Memberships	**128**	**47%**	**275**	**100%**	**26**	**5%**	**488**	**100%**
Total Managers	**90**	**41%**	**217**	**100%**	**24**	**6%**	**388**	**100%**

Notes: Some managers were members of more than one professional body which means that the total number of memberships is greater than the total number of managers holding the memberships. Proportions for Top Managers are calculated from the number of managers who were members of each professional body.

The SMC managers can be used to illustrate the variety and volume of their connections with professional organisations. This group of managers were members of a range of professional bodies with a strong engineering bias, reflected in the fact that 185, almost half (48%) of the SMC members, were chartered engineers.[16] Of the 202 (41%) engineers the majority were members of the IEE (82%)[17] and the remainder, the IMechE[18] (18%). Another 40 were members of other technical institutions. Among the non-technical group, some managers were members of more than one accountancy body but most were members of the CA/CCA[19] or the CMA.[20] Secretaries, on the other hand, were represented by one body and were members of

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[16] Chartered Engineers were those who had acquired designated standards through academic qualifications, training and responsible experience, and were members of a nominated Chartered Engineering Institution. They were awarded the status of Chartered Engineer (CEng) when they were placed on The Engineering Council Register. Source: J. C. Levy, *Consultative Document: Standards and Routes to Registration (1985 Onwards)*, (October 1983), The Professional Institutions Directorate of The Engineering Council, pp.1-4.

[17] Institution of Electrical Engineers.

[18] Institution of Mechanical Engineers.

[19] Institute of Chartered Accountants; Association of Certified and Corporate Accountants.

[20] Institute of Cost and Management Accountants.

the Chartered Institute of Secretaries. The Institute of Personnel Management (IPM), had a small number of members, which is surprising in the context of the size of the electricity industry's employee base. Membership of the British Institute of Management was highest among the technical group (80%).

Differences between those who became top managers

As a proportion of their own professional group, those who became top managers featured most strongly among the non-technical professions. Henley managers who went on to become top managers, were usually members of the accounting (66%) or secretarial (55%) professions, and a half were members of the BIM (49%).

Proportionally fewer professional engineers became top managers. The number of SMC managers who became top managers is so small that making a comparison with the Henley group, in relation to professional membership, is difficult. However, as a proportion of their professional group, it can be seen that, yet again, membership of the accountancy (12%) and secretarial (9%) professions was higher than for professional engineers (4%) who became top managers.

The IEE was an important professional institution because it influenced the training of engineers and the standards they were required to achieve. Higher standards than the electricity industry itself thought were necessary in order for it to recruit the requisite numbers of engineers into the industry and to promote those from manual backgrounds to engineering status. Non-technical chairmen were granted ex officio

membership as Companions of the IEE, which enabled them to maintain important two-way working relationships with the professional institution.

Although the industry's workforce was comprised at one point of a quarter of a million individuals, personnel management appears to have been given a comparatively low profile by a management comprised mainly of engineers.

While it was imperative to qualify in a chosen profession and to gain membership of a professional institution at the start of a career, membership of a management body did not become recognised in the electricity industry until some twenty years after nationalisation. The British Institute of Management, which had been founded around the same time as the Administrative Staff College, Henley, gradually acquired an increasing number of members from the electricity industry. Over half (52%) of those who attended Henley after 1970 and went on to top management positions, held membership of the BIM. Indeed it was the top managers in the electricity industry of the 1980s among whom it can be seen that membership of the British Institute of Management was commonplace. This was at a time when the negative effect of the lack of management education, training and development was becoming a topical issue that could not be ignored.[21]

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[21] T. W. Leggatt, *The Training of British Managers* (1972), HMSO. See also, T. G. P. Rogers and P. Williams, *The Recruitment and Training of Graduates* (1970), Institute of Personnel Management (IPM), and R. F. Holdsworth, *Identifying Managerial Potential* (1975), Management Survey Report No. 27, BIM.

(vi) Career progression

The career paths of managers who reached top management positions were easier to trace than those who did not. This final part of the investigation concerns the level of top management that was achieved.

It was shown in Table 3 that a larger proportion (41%) of the Henley managers became top managers, compared with a relatively small proportion (6%) of SMC delegates, although a similar proportion of those who became top managers shared a technical background (Henley 60%; SMC 63%). The main difference in the career progression of the Henley and SMC managers, analysed in Table 11, is that around a quarter (23%) of Henley top managers became chairmen but none of the SMC group achieved this position.

Table 11

GMC Henley 1948-1982 and SMC 1977-1986
Management function of Electricity Industry future Top Managers

	GMC, Henley				Senior Managers Course			
	Tech	Non-Tech	Total Top Managers		Tech	Non-Tech	Total Top Managers	
	No.	No.	No.	%	No.	No.	No.	%
Chairman	16	5	21	23	0	0	0	0
Deputy Chairman	5	1	6	7	1	0	1	4
Chief Engineer	6	0	6	7	7	0	7	29
Chief Comm. Officer	7	1	8	9	3	0	3	12
Chief Accountant	0	7	7	8	0	5	5	21
Board Secretary	0	9	9	10	1	0	1	4
EC Adviser	1	3	4	4	0	0	0	0
Personnel Director	0	2	2	2	1	1	2	8
Other job	19	8	27①	30	2	3	5②	21
Total	54	36	90	100%	15	9	24	100%

Note: ① CEGB Director-General (5); Other Directors (19); other job (2); Managing Director (1).
        ② Other Directors.

Other core top management positions reached by the Henley group included deputy chairmen (7%), chief engineers (7%), chief commercial officers (9%), chief accountants (8%), and secretaries (10%). The distribution of the few core top posts

among SMC managers comprised one deputy chairman (4%), seven chief engineers (29%) and five chief accountants (21%). The balance was made up from three who became chief commercial officers, two became personnel directors, while one became a board secretary.

With regard to management succession, the greatest difference between the Area Boards and the CEGB is that there were more opportunities to rise to the topmost echelons of management positions in the Area Boards because there were twelve times the numbers of chairmen compared with the CEGB's one chairman. In addition, those seeking the highest posts could move across Area Boards. It was unusual to move from an Area Board to the generating board and vice versa but occasionally the move was achieved. For example, two Henley managers nominated by the CEGB, became chairmen of Midlands Electricity and Yorkshire Electricity Boards. However, Table 12 shows that the majority of those who became chairmen originated mainly from the Area Boards (62%), rather than the CEGB (24%) or the Electricity Council (14%).

Table 12

GMC Henley 1948-1982
Boards that nominated future chairmen

Organisation	Chairmen		GMC Henley Top Mgr.①		Not TM	
	No.	%	No.	%	No.	%
Area Boards	13	62	49	41	70	59
CEGB	5	24	26	37	44	63
Electricity Council	3	14	15	54	13	46
Total	21	100%	90	41%	127	59%

Notes: Percentages are calculated as a proportion of the total managers sent by each board and sum across the columns, except for the Chairmen column. ① Includes chairmen.

Career progression - SMC

Almost half of the SMC managers made some progression in their careers but the proportion who became top managers (6%) was very small compared with the Henley group (41%). Table 13 shows the career advancement of the SMC managers analysed into three groups: those who progressed (46%), those whose careers remained static (35%) and those who subsequently retired, resigned or died (19%).

Table 13

Senior Managers' Courses 1977 - 1986
Career progression - Last named position

Career progression	No.	%	
Top Management	24	6)	
Higher post/higher grade	125	32)	46%
Different post but same grade	22	6)	
On transfer or secondment	6	2)	
Static careers			
Same post and grade, or post renamed	127	33)	35%
Same post but higher grade	9	2)	
Retirement, resignation, death			
Retired	61	16)	
Died	6	2)	
Redundant	4	1)	19%
Resigned	3	1)	
Not known	1	*	
Total	**388**	**100 %**	

Note: * Means that the proportion is less than 0.5%.

Some managers moved sideways in their careers. For example, one individual was a Divisional Manager when he attended the course in 1984 but became an Area Board Commercial Director on the same grade. That is because Chief Officers were on the same managerial grading as Divisional Managers. This anomaly arose when two Districts were merged to form one Division. As a result of their increased responsibilities for managing a larger area, the managers were upgraded and this resulted in them having the same grade as Chief Officers. Thus, there was no financial incentive for divisional managers to move from their self-managed

locations to a head office environment. Although there was, for those who desired further progression, the incentive of top management experience and status. Another important factor was their personal motivation to become a deputy chairman or a chairman. Some, of course, had little choice. For example, when two districts were merged into one division, only one divisional manager was required and the alternative was usually retirement. Of the twenty-two managers in a different post but on the same grade, shown in Table 13 above, the majority were from Area Boards (19); and the remaining three were from the Electricity Council.

Same post at the same grade

Some one hundred and twenty-seven SMC managers remained in the same post at the same grade or occupied posts that had been renamed. Managers from the Electricity Council were less likely to progress to higher posts than their colleagues from the CEGB or the Area Boards. Almost two-thirds (62%) of course managers from the Electricity Council, and less than half (43%) of those from the CEGB remained in the same post they were in when they attended the SMC. There was less likelihood that the Area Board managers would be in the same post (26%). Table 14 analyses by employing board those whose careers stagnated and those who left the industry through retirement, resignation or redundancy.

Retirements, resignations and redundancies

Within ten years after attending the SMC some one in six (16%) of SMC managers had retired. Half (52%) of the managers who attended the SMC either did not progress any further in their careers or left the industry. It can be seen from Table 14

that the managers from the Electricity Council were the most under-utilised with 95

per cent wastage through retirement, resignation, redundancy, and death or stagnant

careers. The highest proportion of managers to retire (19%) were the managers from

Area Boards. The highest proportion of managers whose careers were static (62%)

were from the Electricity Council, compared with the CEGB (43%) and the Area

Boards (26%).

Table 14

Senior Managers' Courses 1977 - 1986
Resignations, Retirements and Static Careers

		EC	CEGB	AEB	Total	
		%	%	%	No.	%
No career movement		62	43	26	127	33
Retirements		5	11	19	61	16
Died		5	0	2	6	2
Resignations		5	2	1	3	1
Redundant		19	0	0	4	1
Total	(No.)	20	66	118	201	52
Total attending	(No.)	21	115	251	388	100
Wasted resources	(%)	95%	57%	47%	52%	

Table 15 analyses those who retired by their job function, and shows that district

managers formed the largest group. It will be recalled that some sixty-eight district

managers from the technical group attended the SMC and that just one became a top

manager. In advocating that district manager posts should be used as a training post

for potential top management, Lord Herbert[22] suggested that the number of

management districts should be increased, resulting in two hundred managerial posts

throughout the twelve Area Boards in England and Wales. But twenty or thirty years

later the boards were in the process of retrenching and districts were merged with

other districts, which had the effect of reducing the number of management posts that

Herbert had identified. Some four in ten of the district manager group (40%) retired

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[22] Herbert Report (1956), pp.76-77.

within a few years of attending the SMC. It can also be seen from Table 15 that non-technical managers were less likely to retire (8%) than their technical counterparts (20%). Managers who worked in jobs that were created in response to the need for such posts, did not retire. For example, those employed in the customer service, computing and information technology functions.

Table 15

Senior Managers' Course 1977 - 1986
Retirements by Function at time of Course

Job Function	Retired (1) No.	All SMC (2) No.	(1) as % of (2) %
Technical			
District Manager	27	68	40
Power Station Manager	8	43	19
Engineering	11	73	15
Commercial	4	48	8
Transmission	0	13	0
Sub-total	50	245	20
Non-Technical			
Secretary	5	33	15
Personnel/IR.	2	18	11
Accountant	3	38	8
IT/Computing	0	7	0
Customer Service	0	9	0
Other function	2	38	5
Sub-total	12	143	8
Total	62	388	16

Summary

Some two hundred and seventeen managers attended the external Henley GMC over a thirty-year period from 1948 to 1982. Two in five (41%) of those managers became top managers. Some three hundred and eighty-eight managers attended the internal industry course for Senior Managers during the ten-year period from 1977 to 1986 inclusive. Only six per cent became top managers. Comparatively, the most successful managers to achieve top posts were sent to Henley by the Electricity Council, but Area Board managers were more successful in producing chairmen (64% of chairmen). None of the SMC group became chairmen. Some boards were

considerably more successful than others in producing future top managers but the achievement of successful places at Henley did not result in a higher proportion of top managers. SWEB sent seven managers and five of them (71%) became top managers; but of the eighteen from YEB just five (28%) became top managers.

The Henley course provided a two-month period for the ESI managers to leave their posts and mix with managers of similar calibre from external organisations. The SMC was an internal course for Senior Managers that provided an arena for managers to meet from all parts of the ESI. It was useful for the cross-fertilisation of ideas and opportunities to shine in front of top managers and/or to promote ideas and persuade top managers to their opinion. The interpretation of results from comparisons of these two groups of managers that rose to top management positions must be treated with caution. One reason is that the Henley managers attended courses over a thirty-year period and, obviously, the opportunities for promotion would be greater over a longer period of gradual succession than the ten-year period during which managers attended the SMC. On the other hand the fact that more Henley managers became top managers over a thirty period could, over time, have led to expectations that there was something special about these managers, a 'halo' effect, or that they were 'crown princes', the chosen few. There is some evidence that, in part, substantiates this supposition. Electricity boards were asked about the possibility of Henley becoming a status symbol, with the added observation that 'Many wear their ties quite proudly and in turn may influence selection'.[23] Some

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[23] Letter from R. G. Bellamy, Electricity Council, circulated to eight electricity boards (22 April, 1970), EC archive.

boards confirmed that 'Attendance [at Henley] is considered a status symbol'.[24] Another factor, which set the Henley managers apart from their SMC counterparts, was that they mixed with their peers from other industries, from government departments and other organisations. The people they mixed with could also have risen to top management positions and this network of 'Henley old boys' could have facilitated the workings nationally at the highest level of inter-organisational effectiveness and co-operation. The most intriguing finding was why some Area Boards should have been more successful in producing top managers from a comparatively small number that attended Henley, especially in the case of SWEB, which employed the smallest number of managers (6%). It was also noticeable that Henley managers were much younger than SMC managers and they would thus have had longer career spans in which to progress. Some boards found it difficult to meet Henley's 'age and salary specifications and these considerations have largely determined our choice'.[25] On the other hand, SMC managers did not achieve the same sort of career progression as Henley managers and around one in five retired. While two in five of those who attended Henley became top managers (41%); one in ten of all Henley managers became chairmen (10%). An average of seven managers a year attended Henley, representing 0.5 per cent of all ESI managers so that the proportion of those who attended Henley and became top managers can be seen to be comparatively high. Finally, it is unlikely that the numbers of managers who

[24] Letter from London Electricity Board (27.4.1970), to Mr R. G. Bellamy, Electricity Council. Also letter from Yorkshire Electricity Board (27.4.1970), letter from North Eastern Electricity Board (7.5.1970); letter from South Eastern Electricity Board (8.5.1970), all addressed to R. G. Bellamy, Electricity Council, all EC archive.
[25] Letter from London Electricity Board (27.4.1970), to Mr R. G. Bellamy, EC archive.

attended these management development courses would have done so if it had not been for the pro-active monitoring and lobbying by the Electricity Council, which administered the nominations to the courses.

Part 2 began by investigating the attitudes of the ESI to management development. This chapter examined two types of ESI management development courses. The next chapter is concerned with evaluation.

Chapter 6. Evaluation

The previous two chapters examined the attitude of the electricity industry towards management development; and analysed and compared the characteristics of the managers who attended two management development courses. This final chapter to Part 2, relating to the development of electricity managers, is concerned with the evaluation of management training and is divided into two sections. Section (a) focuses on the way in which the electricity industry attempted to evaluate management training. Section (b) reports on the attitudes of electricity industry managers to their training, development, succession and the future of the industry. Chapter 4(c), above, described the lack of a consistent approach to management training in the electricity industry before the establishment of the ESITB, and the role of the ESITB in the subsequent production of a Recommendation on Management Training and Development. While the top management in each Electricity Board was responsible for management development policy and its implementation, the Recommendation provided a standard procedure on management training and development for each board to operate. Chapter 4(c) also referred to the diverse practices that had previously been in operation in each board and to the uncoordinated approach to management training within the federal industry. The nature of the federal industry, in this context, meant that each Electricity Board had individual responsibility for its own policies and procedures for recruitment, training and promotion. Following the introduction of the Recommendation on Management Training and Development, the ESITB used its powers to evaluate the ways in which its Recommendation was in use in each of the electricity boards throughout the industry. Although the ESITB did interview some managers during the course of

its review it did not attempt to evaluate the training that managers received,[1] or

what managers thought of their training and development, which is one of the

subjects considered in section (b).

(a) Attempts by the electricity industry to evaluate management training and development

Scope of the term evaluation

This section concerns the evaluation of the ESI's Recommendation on

management training and development, introduced in 1969 (see Chapter 4, section

(c), above). It will be seen that the ESI's approach to evaluation of its

management training was restricted in its scope so that it did not fulfil the

government's definition at the time, that evaluation concerned:

> *The assessment of the total value of a training system, training course or programme in social as well as financial terms.*[2]

Or Hamblin's broader definition of the term as:

> *Any attempt to obtain information (feedback) on the effects of a training programme, and to assess the value of training in the light of that information.*[3]

This is not to say that the electricity industry lagged behind other industries in

evaluating its management training and development Recommendation. Few, if

any, organisations appeared to have considered the evaluation of a training

programme. One survey, in large organisations, found a belief that the results of

management training cannot be meaningfully assessed. However, the majority of

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[1] Leggatt, *Training of British Managers* (1972), p.13.

[2] R. Stammers and J. Patrick, *The Psychology of Training* (1975), p.116, extracted from The Department of Employment's 'Glossary of Training Terms' (1971).

[3] C. Brewster, *Evaluation of Management Training: A Focus on Change,* in J. Beck, and C. Cox (Eds.) 'Advances in Management Education' (1980), p.284.

organisations surveyed said that they carried out assessments of the benefits of internal and external management training.[4]

The process of evaluating managers' training was under consideration by the ESITB but had not been developed. Although there were attempts in some boards to gain feedback from managers through written reports on training courses, the process of evaluating performance had, in one example, been tried and rejected:

> *There had been an attempt to evaluate training by assessment of changes in a manager's performance, but this had not been accepted. At least in the CEGB.*[5]

The career development policy[6] operated by the industry provided guidance on recruitment, training, promotion, and supervisory and management development, but none of the subsequent management development schemes dealt systematically with management training until the introduction of the ESITB Recommendation[7] on this subject. The Recommendation established a framework within which individual electricity boards were able to make their own plans and arrangements for developing their managers. The management training Recommendation had been introduced for operation throughout the electricity industry, but little was known about its reception or implementation throughout the industry. Within a year of its introduction there was comparatively little up-to-date information available about management training and development arrangements within electricity boards. Neither was it known whether middle

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[4] Leggatt, *Training British Managers* (1972), pp.11-12.

[5] Ibid., p.79.

[6] NJAC, Careers Development in Electricity Supply (1.9.1959), 30th Meeting, Appendix 2, p.19, EC archive.

[7] ESITB, *Recommendation 16* (1968), p.3.

managers had been briefed and involved in its implementation.[8] All of the ESITB's Recommendations were monitored and their progress examined by inspections that were carried out by Regional Training Officers, but the management training Recommendation was treated differently. It was decided instead, because of the implications that management training had for each organisation, to introduce a programme of survey visits that involved the industry's top management.[9] During the survey visits, which commenced in 1969 and concluded in 1973,[10] discussions took place with the chairman and/or deputy chairman and senior officers of the electricity boards involved. There were also interviews with a number of managers and others who were subject to the operation of the Recommendation. In order to provide a consistent approach to the review of management training each of the eleven survey visits was based on a questionnaire that covered the main headings of the management training Recommendation. The headings comprised (i) the level of responsibility for management development; (ii) the assessment of managerial manpower requirements; (iii) the determination of job requirements to identify training needs; (iv) recruitment and selection for training; (v) the importance of appraisal in identifying individual training needs; (vi) programmes covering training and

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[8] ESITB, Committee C (Management and Supervisory Training) (6.8.1969), Minutes, 9th Meeting, p.4, EC archive.

[9] Each visit involved the chairman of the Training Board, Sir David Watherston (who was also chairman of the Management and Supervisory Training Committee of the Board); R.G. Bellamy, Chief Executive of the Board; and D. Williams, Chief Training Officer of the Board. The representatives of the host board in each case included the chairman, deputy chairman and particular chief officers in distribution boards, or, in CEGB Regions, the Director-General and Regional Management Committee Members; together with, in every case, senior personnel management. Each visit also included interviews with a number of senior unit managers and with staff undergoing training and development.

[10] ESITB, 'Management Training and Development in Electricity Boards' (3.10.1973), 15th Meeting, ITB(C)43, EC archive.

development; (vii) evaluation and feedback.[11]   The main findings of the survey

team are summarised below under each heading.

(i)   Responsibility for management development and training

The survey visits found that the policy for management development in each

Electricity Board rested with the top management; the senior or unit managers

were responsible for its operation.   While most of the boards visited operated a

formalised training policy that was derived from the main headings of the

management training Recommendation, some did not:

> *A few boards had informal policies relying on a direct interpersonal process*
> *involving unit management and chief officers, aimed at identifying and*
> *developing potential.* [12]

There was an implied criticism by the ESITB of the continued development of the

individual rather than the management team, which had implications for the

operation and effectiveness of the employing board unless the team approach was

considered:

> *The concept of training and developing the management team, as a contribution*
> *to achieving organisational aims for which it was collectively responsible, had*
> *not become familiar, and there was only small evidence of moves towards it.*
> *Traditionally, staff development policy in the industry attached importance to*
> *realising the long-term career potential of the individual considered in isolation*
> *from his colleagues.   Recommendation 16, while concerning itself with*
> *management training specifically, maintains this traditional viewpoint.   The*
> *industry might take steps to acquire experience and skills in the organisational*
> *development and team-training approaches.* [13]

The survey team was concerned that awareness of a formal management

development scheme was insufficient and the scheme had to be seen to be

effective.   Conversely, informal schemes were more likely to be treated with

suspicion:

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[11] ESITB (30.11.1973), 54th Meeting, ITB 458, pp.2-3, EC archive.
[12] Ibid., p.4.
[13] Ibid., p.5.

A documented and publicised scheme with prescribed entry levels can lack credibility and so be self-defeating if it could not be seen to produce results which were generally acceptable. On the other hand, voluntary or informal arrangements could arouse suspicions that merit was not the sole criterion to be taken into account. This was an aspect of management development which would repay further investigation. [14]

A potential source of bias appeared in the treatment of line, as opposed to functional mangers:

> *There was evidence of a primary concern with the requirements of line managers and this had an influence on the approach to training and development. Management training and development in function areas was being overlooked.* [15]

Another source of potential bias in the consistent approach to the development of managers was the way in which the top management in some, but not all, boards involved themselves in the selection and progress of managers:

> *Chief Officers in particular were discovered to have an impressive degree of practical involvement, in terms for example of interviewing, monitoring the progress of filling particular vacancies 'down the line', and generally building up personal knowledge of staff subject to training and development measures.* [16]

(ii) The assessment of managerial manpower requirements

Around half of the host boards estimated requirements for some four to five years ahead and one estimated its requirements over a ten year period. Several used succession charts. The host boards that had experienced organisational change said that it had the effect of reducing the number of managers required and resulted in surplus managers and that a surfeit:

> *can result in a period of stagnation as far as promotion is concerned and lead to the loss of younger staff of ability.* [17]

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[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] Ibid.

(iii)   The determination of job requirements

A wide range of job descriptions or job specifications were found to exist in the industry, but they were not useful in identifying or determining the management training that was required by a person who sought to fill that post:

> *The job description approach to the determination of job requirements was discovered to be less appropriate to the task of establishing the knowledge and skill required than had been expected. Some alternative means of doing this needs to be investigated.*[18]

The earlier surveys also suggested that the type of job specification normally drawn up for the purpose of filling a managerial vacancy was rarely useful as a means of identifying the type of training required by a person seeking to fill that post. The need for more training in appraisal methods was also evident.[19]

(iv)   Recruitment and selection

The survey team found that the host boards recruited for specific posts. The potential to become a manager was a factor that became apparent from success in post:

> *initial recruitment is still principally by reference to the requirements of the training scheme for the initial post. This is a matter of policy for most boards, who looked first for the promise of a good employee in a particular functional job, and only secondarily for a potential manager.* [20]

Indeed, the host boards relied on proven ability and experience to make decisions about management potential in tandem with regular appraisal, training, development and career progression practices:

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[18] Ibid., p.14.

[19] ESITB, *Report and Accounts* (1971), p.16.

[20] ESITB (30.11.1973), ITB 458, p.7, EC archive.

The general view might be summarised as confidence that, from the ranks of existing employees, future management staff would present themselves for consideration in sufficient numbers and quality, so long as the electricity board was careful to ensure three conditions for their development:

  a) *an adequate intake to initial training of those with graduate/professional qualifications or potential;*
  b) *sound selection in terms of the initial training and of progressive appointments thereafter;*
  c) *adequate arrangements for appraisal, training, development and experience.* [21]

The survey team found that the conventional belief in the Industry was that individuals with potential would be noticed following a series of gradual promotions:

The industry maintained its traditional view that the emergence and development of potential is a step-by-step - in effect, a 'post-by-post' process. [22]

Some twenty years' earlier it had been recommended[23] that certain people should be trained at an early age to fill management succession needs, but the survey team found that there was no evidence of selective development and progression:

There is no evidence of the directed and accelerated development of individuals explicitly recruited or designated as management trainees. [24]

The survey team tended to agree with the Herbert Report that there should be a system of identifying and training employees with management potential:[25]

there is however a need to consider the younger employee of outstanding ability whose progress demanded a certain pace, in relation to his age, for his potential to be realised fully. [26]

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[21] Ibid., p.7.
[22] Ibid., p.8.
[23] Herbert Report (1956), p.86.
[24] ESITB (30.11.1973), ITB 458, p.8, EC archive.
[25] Herbert Report (1956), p.144.
[26] ESITB (30.11.1973), ITB 458, p.8, EC archive.

(v) The importance of appraisal in identifying individual training needs

The use of regular appraisals was perceived to be a more useful tool for identifying training needs at a time when performance by results was under consideration:

> *The most common alternative view is that, with the move to performance target setting, management jobs will tend to be defined increasingly in terms of their key result areas. Further, since the process of target-setting is part of periodic appraisal. Changes in emphasis, and changes in the nature of jobs caused by organisational change and resulting in the need for new skills, can also be dealt with in appraisal. In this way, it is felt, the 'description' of a job, in terms of its key outputs, will be automatically and regularly updated.* [27]

Evaluating the effectiveness of training was expected to be carried out within the systematic appraisal process.[28] The survey team found that eight of the eleven boards visited had a formal appraisal scheme. They found some evidence of a change in emphasis in that consideration of 'the man in the job', and the discussion and agreement of performance targets, were increasingly becoming the most important features though the more traditional concern with 'personal qualities' had not entirely disappeared.[29] It will also be seen in sub-section (vii) below, that the host boards relied on appraisals for evaluation and feedback on management development. Both the host boards that were visited, and the individual managers who were interviewed, had emphasised the importance of training in appraisal skills.[30]

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[27] Ibid., p.7.
[28] ESITB, *Recommendation 16* (1968), p.19.
[29] ESITB (30.11.1973), ITB 458, p.9, EC archive.
[30] ESITB, *Report and Accounts* (31.3.1971), p.16.

(vi)   Programmes covering training and development

The survey team was impressed by the amount of training and development that existed in the boards that it visited but commented that 'only in a minority were there formal procedures for organising, monitoring and co-ordinating it'.[31] They found training on the job was through planned experience, job rotation, secondment or transfer, with the most emphasis on transfers, secondments or assignments on special tasks. The survey team noted that there was no evidence of on-the-job coaching.[32] There was an inconsistent approach to the use of formal management education courses and the industry's recommended courses for managers; the survey team reported:

> Boards varied in their degree of use of courses available. At one extreme the Diploma in Management Studies was the only course in general use, while another board used the full range of the industry's internal provision but supported no external courses. [33]

One result, which emerged from the early visits, was the need for an individual to complete his professional training before being subjected to management training:

> Too much weight should not be attached to management training in the early stages of a professional career. [34]

Because:

> In their early years immediately following the completion of their basic training individuals are probably more concerned with establishing a position in a professional post. [35]

It was believed that training in management techniques became more important at a later stage in their careers:

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[31] ESITB (30.11.1973), ITB 458, p.10, EC archive.
[32] Ibid.
[33] Ibid., p.12.
[34] ESITB, *Report and Accounts* (1971), p.16.
[35] Ibid.

if they appeared more likely to progress to posts with managerial, rather than specialist responsibilities. [36]

It is likely that the selection of individuals to attend external courses for executive development and those provided by Henley and the Business Schools had far wider significance than the anticipated effect on the careers of those selected:

> *In the case of* [Executive development courses] *and* [Henley and the business schools, including Harvard] *there was evidence that selection for external courses is regarded – at least by eligible staff – as having the career significance of an accolade, meaningful beyond intrinsic value.* [37]

(vii) Evaluation and feedback

The survey team found little evidence of attempts at evaluation of individual courses or the effectiveness of management development training; on the other hand, most of the boards visited relied on individual appraisal interviews for evaluating and obtaining feedback about that employee's development.[38] The findings of another study that included the electricity industry were, thus, more general because they did not take account of the various practices in individual boards when they reported:

> *Appraisal of performance is conducted by discussion based on target-setting, except at senior levels, and assessment of training needs takes place as a result of this performance appraisal, in conjunction with the use of job descriptions.* [39]

This study also noted that assessing the effects of training and development had not been introduced but that this would change as the benefits of training were recognised:

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[36] Ibid.

[37] ESITB (30.11.1973), ITB 458, p.12, EC archive.

[38] Ibid.

[39] Leggatt, *Training British Managers* (1972), p.13.

Evaluation of training has not been developed, but it is held that training has been beneficial. Management development will receive greater attention in the future, including the assessment of needs and the evaluation of the benefits of training. [40]

Summary to 6(a)

Although the ESITB was able to use its powers to investigate the implementation and operation of its Recommendation in several electricity boards, it did not have the power to ensure their co-operation. This meant that the Recommendation on management training and development in the electricity industry was not uniformly applied, which had implications for the development and quality of managers. In some boards chief officers followed the careers of managers and this, along with the heightened sense of being distinguished by being chosen to attend prestigious courses, meant that in some boards, but not others, there was a bias in the training and development of managers that was not evaluated. There was widespread use of appraisals to facilitate discussion about development and target setting. However, the appraisal process, too, was considered to be inadequate because those responsible for undertaking the appraisal needed training themselves. Managers tended to emerge following a series of promotions and were developed individually without the help of a mentor or coach who could have helped to develop their role in the management team. Finally, although individual managers were set targets during the appraisal process, their part in the management team and their part in the successful operation of the board were not within the scope of their development.

Section (a) examined the ways in which the ESITB attempted to review the

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[40] Ibid.

implementation and operation of its management training recommendation. The next section concerns the evaluation, in 1988, by managers themselves of their training, development and career progression.

(b) Survey of electricity industry managers: their attitudes to training, development, succession and the future of the ESI.

It will be recalled that Part 1 concerned the origins of ESI managers and included chapters on their recruitment, training, development and progression. Part 2 examined management development and included an investigation into the career progression of those who attended the Henley and Senior Management courses. In this chapter, section (a) focused on the evaluation of management training. This section reports on the main findings of a survey[41] among top managers and managers in the electricity industry. The study sought opinions about the respondents training, development, progression and their futures when privatisation of the industry was imminent. The section begins with a summarised description of the study, full details of which are set out in the Appendix. The main findings that are relevant to this chapter are produced in four sub-sections that comprise: (i) an introduction that describes the profile of the respondents, including their further education, training and details of their employment in the electricity industry. Section (ii) investigates career development, motivation and managing. Section (iii) examines management selection and succession, and in section (iv) the potential effect of the privatisation of the electricity industry is explored.

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[41] This survey was undertaken privately and independently by Margaret Nisbet as part of this PhD thesis, it was not undertaken on behalf of the electricity industry or any of its constituent parts. The fees to undertake the PhD were obtained from the ESI Educational Incentives Scheme.

(i)   Introduction

In 1988, before privatisation, some 149 senior executives and managers employed in the electricity industry, participated in this survey. The study asked questions about their backgrounds, their jobs as managers, their careers, their attitudes to management development, including their own, management succession plans; and their attitudes towards the privatisation of the industry. Respondents were asked to evaluate their own career development, to identify their perceptions of the most important ways to motivate managers, and to define the qualities they perceived made a good manager and a good leader. A summary of the main findings is reproduced below and the full results of the survey are analysed in the Appendix. Interpretation of the results in percentage form should be treated with caution. Percentages are used to facilitate comparisons between the two groups of top managers and managers and some of the numbers, on which percentages are calculated, are small. Details of the sample and methodology are also described in the Appendix.

The first set of questions gathered personal data about the respondents. This section describes their personal attributes, analysed under the following sub-sections: (a) the respondents, (b) length of service in the electricity industry, (c) age groups, (d) educational institutions, educational accomplishments and professional affiliations, (e) training and, finally in this section, (f) their employment in the ESI.

(a)   The respondents

Some 149 respondents returned questionnaires. Top managers returned 52 of

them, forming some 37 per cent of the population of 142 top managers employed

in the ESI. The total number of electricity industry managers was 1,573 from

which a sample size[42] of 220 managers was selected. Some 97 managers returned

questionnaires, resulting in a response rate of 44 per cent. Full details of the

response rates are analysed in the Appendix, Tables 1-4 inclusive.

(b)   Length of service in the ESI

The respondents were established electricity industry employees. Most of the top

managers (84%) had service of ten years' or more, compared with nearly all (96%)

of the manager respondents. Around three-quarters of top manager respondents

(72%), and managers (75%), had been in the industry for twenty years' or more

(Appendix, Table 7) forming a larger proportion of managers with long service

than those managers external to the ESI. In a survey conducted some ten years'

earlier by the British Institute of Management (BIM) among its members, it was

shown that almost two-thirds (65%) of respondents who worked in nationalised

industries had over twenty years service with their current employer.[43] The BIM

showed that in the private sector, members with over twenty years' service ranged

from 11 to 30 per cent and those in the public sector, excluding the nationalised

industries, ranged from 4 per cent to 35 per cent.[44]

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[42] Selection of the sample is described in the section of the Appendix headed Methodology.

[43] J. Melrose-Woodman, *Profile of the British Manager*, Management Survey Report No. 38, British Institute of Management (1978), p. 29, Table 25.

[44] The groups for length of service for the ESI and BIM studies overlapped by one year, thus, in the ESI study data for length of service was for 20 years and over, whereas the BIM study used the group 'over 20 years'.

(c)   Age structure

The ages of ESI respondents were relatively evenly distributed across both groups

of respondents. Almost one-third (31%) of top manager respondents were under

50 compared with half of the managers (49%), (Appendix, Table 12). In the BIM

survey the top manager respondents were younger than ESI top managers. One-

fifth of ESI top manager respondents (20%) were less than 45 compared with over

a quarter of BIM top managers (28%). Younger ESI managers tended to share a

similar age profile with top managers in the BIM survey[45] but there were more

ESI managers in their late fifties and over than in the BIM study. It can be seen,

from Table 1, that the ESI respondents were older than their BIM nationalised

industry counterparts.

Table 1

Age Structure - ESI and BIM Respondents

Age group	ESI Top Managers %	BIM Top Managers %	ESI Managers %	BIM Managers %	Total ESI Managers %	BIM N.I. Managers %
Under 35	0	2	2	2	1	1
35-44	20	26	25	26	23	17
45-54	32	50	45	52	40	61
55-64	50	20	28	20	36	21
Over 65	0	2	0	0	0	0
Respondents (No.)	52	1137	97	2583	149	467

Note: The BIM age groups are 25-35, 36-45, 46-55, 56-65, Over 65, and do not exactly match the ESI age groups.
Source: BIM. Melrose-Woodman, *Profile of the British Manager* (1978), p.9. ESI: Appendix, Table 12.

(d)   Educational institutions, accomplishments and professional membership

The majority of ESI respondents (72%) had a grammar school education and few

(6%) went to a public school, (Appendix, Table 13). Fewer BIM managers

attended grammar school (50%) but more went to Public School (19%). Public

schools were attended by more BIM top managers (27%) than ESI top managers

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[45] Melrose-Woodman, *Profile of the British Manager* (1978), p.9.

(6%). Table 2 shows the type of school attended, analysed by ESI and BIM

respondents.

Table 2

Secondary School Education - Type of School

Type of School	ESI Top Managers %	BIM Top Managers %	ESI Managers %	BIM Managers %	All ESI Managers %	All BIM Managers %
Grammar	79	48	68	51	72	50
Secondary Modern	8	6	12	8	11	7
Public School	6	27	6	15	6	19
Respondents (%)	93	81	80	74	89	76
Respondents (No.)	52	1145	97	2579	149	3724

Source: BIM: Melrose-Woodman, *Profile of the British Manager* (1978), p.9. BIM figures calculated from Chart 11. ESI: Appendix, Table 13.

Further education

The majority of ESI respondents pursued two main activities after leaving school

and there is little difference between top managers and managers. For some two

in five respondents (39%) there had been a premeditated decision to select an

employer to support their continued educational requirements when they left

school and a similar proportion (37%) had decided to commence their further

education. A comparatively small proportion, around one in ten respondents

(11%), had gone directly into employment, (Appendix, Table 14).

Similar proportions of ESI respondents attended university, including half of the

top managers (50%) and just under half of the managers (47%). Technical

colleges, too, were attended by similar proportions of managers (38%) and top

managers (33%). Polytechnics, on the other hand, were attended by more

managers (27%) than top managers (17%), (Appendix, Table 15). The proportion

of ESI managers who went to university (48%) is similar to the BIM proportion[46]

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[46] Ibid., p.11.

(45%)[47] but more BIM respondents attended technical colleges (54% part-time, 16% full-time) than ESI respondents (36%) and 'just under a quarter' of BIM respondents attended polytechnics compared with a similar proportion (23%) of ESI respondents.

Academic achievements

Respondents were asked to list their academic and other achievements, together with their membership of associations. The results described briefly below are for first degrees, higher degrees, and membership of professional associations.

First and higher degrees

Over half (54%) of all respondents held first degrees and there was little difference between the two groups of respondents, (Appendix, Table 9). The proportion of ESI managers that held a first degree (54%) was greater than the proportion of BIM respondents with a first degree (28%).[48] There was also little difference among ESI respondents who held higher degrees, comprising some one in five (19%) of all respondents, (Appendix, Table 10) this was a higher proportion than the amount of higher degrees held by BIM respondents (8%).[49] Perhaps not surprisingly, the Diploma in Management Studies (DMS) was held by more BIM respondents (36%)[50] than ESI respondents (5%).[51]

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[47] This figure is for full-time university attendance. Some 17 per cent of BIM managers attended part-time university courses. ESI managers were not asked to distinguish between part-time and full-time attendance.

[48] Melrose-Woodman, *Profile of the British Manager* (1978), p.16, Table 8.

[49] Ibid.

[50] Ibid.

[51] Appendix, Table 16.

Membership of the professions

Among ESI respondents, membership of the engineering institutions predominated over the other professional bodies. Over two in five respondents were Chartered Engineers (43%); more top managers (56%) held this status than managers (36%). All of the managers were members of a number of engineering institutions but membership of the Institution of Electrical Engineers (IEE) predominated (39%). More top managers (56%) than managers (20%) were members of the IEE, (Appendix, Table 11). The BIM respondents were members of a broad range of professional bodies, and membership of the engineering bodies was higher than it was for other institutions; but membership of the IEE (13%) was smaller than membership of the IMechE (16%).[52] In the ESI, membership of the IMechE was held by some 13 per cent of respondents. It is also pertinent to point out that one-third (34%) of ESI respondents were members of the BIM.

(e)   Training

Over half (54%) of all ESI respondents had undertaken technical training. For one in eight (13%) the training was of a non-technical nature, (Appendix, Table 17). Of the 81 respondents who were technically trained, some three in five (60%) were trained outside the electricity industry. Non-technical training such as taking articles with solicitors or accountants were taken up outside the ESI by three-quarters (75%) of top manager respondents, whereas manager respondents (55%) were more likely to be trained within the ESI. Some 49 (35%) respondents were trained in the ESI. The majority of these received technical training (65%),

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[52] Melrose-Woodman, *Profile of the British Manager* (1978), p.17, Table 10.

(Appendix, Table 18). The average duration of technical training in the ESI (5.23 years) was longer than the technical training experienced by those in non-ESI schemes (3.53 years), (Appendix, Table 19).

(f)   Employment in the ESI

Some one in six (17%) respondents had joined the ESI before the age of twenty and almost a half (46%) had joined before the age of 25 years, (Appendix, Table 20). Top manager respondents were more mobile than manager respondents. Nearly all of the manager group had experience in only one (63%) or two (32%) electricity boards compared with fewer top managers (40% and 29% respectively). Some top managers had worked in three (17%) or more (13%) different boards, (Appendix, Table 21).

Some of the Area Boards emerged as employers of top manager respondents more than others. On average, these respondents passed through some boards six times. Thus, SEEB, SEB, MEB, EEB and NORWEB were above average for the number of managers who passed through them. While NEEB, SWaEB, Manweb and YEB were below average for employing the mobile respondents[53] (Appendix, Table 23). This may mean that the mobile respondents were more attracted to certain boards. The boards themselves may have attracted managers as springboards in their careers. There could have been a number of reasons, including top management, culture, geographical, business success, philosophical, networking etc. Perhaps there were fewer vacancies in some boards than in others because managers remained with their home board until retirement.

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[53] See Appendix, Table 4. SWaEB and YEB chairmen instructed their top managers not to participate in the survey.

(ii)   Career development, motivation and managing

This section reports on the respondents' development, motivation and work activities, and is divided into seven sub-sections. These include: (a) the courses attended; (b) methods of learning; (c) career development; (d) skills that should have been developed; (e) the influence of writers and theorists; (f) factors that motivate managers; and (g) allocation of the time spent at work.

(a)   Courses attended

Almost eight in ten (79%) respondents had attended management courses, (Appendix, Table 25). Over half (55%) of the courses attended were held at the electricity industry's own training venues such as Horsley Towers, Buxton, Bricketwood or at an Area Board's own training centre. Those who became top managers were more likely to have attended the courses held at external organisations (63%) than courses held at ESI training centres (37%). Conversely, managers (60%) were more likely to have attended the courses held internally at ESI training centres, where they could mingle with colleagues, peers and senior managers. Just four in ten had attended external courses where they could fraternise with people of equivalent status from other industries and business organisations.

(b)   Methods of learning

Respondents' views were sought on the methods of learning that had formed a part of their career development. The three most useful methods of learning for these respondents involved personal study (59%), peer group study (58%) and third party direction in the form of lectures (47%). The methods that were considered

to be the least useful and achieved negative net usefulness scores[54] were 'hypothetical case studies' (minus 21 percentage points), followed by 'programmed instruction' (minus 9 points), 'business management games' (minus 9 points) and 'TV/Video films (about business)' (minus 3 points), (Appendix, Table 26). In a BIM study[55] among some 278 companies, it was found that the most frequently used training techniques were 'Films' (75%), 'Case studies' (69%), 'Management Games' (40%), 'Programmed instruction' (34%), 'In-tray exercises' (32%) and 'Closed circuit TV' (16%). Although the ESI respondents were asked to rate the usefulness of various techniques that they found enhanced their capacity to learn, the training techniques that were used by the BIM respondents for management development gained comparatively little support from ESI respondents. Comparisons between the methods of learning found to be most useful by the ESI respondents and the training techniques used by BIM respondents are shown in Table 3.

Table 3

Learning Methods found to be most useful by ESI respondents compared with Training Techniques employed by BIM respondents

	ESI			BIM
	Most/ Fairly useful	Not very/ Not at all useful	Net usefulness	Training techniques used
Methods of Learning	%	%	± %	%
Case Studies	34	26	+8	69
TV/Video Films (about business)	26	29	-3	75
Business Management Games	24	33	-9	40
Programmed Instruction	19	28	-9	34

Source: BIM, *Management Development* (1969), p.9. ESI: Appendix, Table 26.

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[54] The net score was calculated by deducting the 'not useful' scores from the 'useful' scores and in this case there was a surplus of 'not useful' scores over 'useful' scores.

[55] BIM, *Management Development and Training. A survey of the schemes used by 278 companies* (1969), p.9.

(c)   <u>Career development</u>

This section concerns the type of career development that respondents had found

most useful. The results show that the most important type of career development

to these respondents involved their practical experience and efforts. Almost nine

out of ten (88%) thought that their most effective career development was

achieved by working at a 'new job gained through promotion'. The second way

considered important by almost nine in ten (85%) respondents was by 'learning on

the job'. In third place, some eight in ten (79%) rated 'handling a project in their

own board' as effective in their development and the fourth most effective

development, rated by some six in ten (61%), was 'writing or speaking'.

Respondents thought little of employing their efforts, or gaining experience, from

'secondment in the ESI' (39%) or 'handling a project in another board' (13%). Just

over half (54%) opted for 'attendance on external courses' as relatively important.

There was though some ambivalence regarding the 'attendance on the ESI's own

courses', with just one third (32%) in favour and one-third (31%) opposed to

them. More contentious, and resulting in a negative score (minus ten percentage

points), was 'feedback through appraisal', a quarter (24%) thought this was

effective but one third (34%) thought it was 'not useful' in their career

development, (Appendix, Table 27). The concept of 'feedback' alone is included

in the section about motivating managers (Appendix, Table 31). As a motivator,

some seven in ten respondents (69%) regarded this concept as 'most' or 'fairly

important' and few (7%) discounted its importance. Yet, in their career

development, the feedback they received through appraisal appeared to produce

more negative than positive responses.

(d)   Skills that respondents should have developed

The two key specific skills that stood out from the others concerned finance and staff development. 'Finance and accounting' was the skill that most respondents (63%), had not developed but, in retrospect, said would have been useful in their careers. Top managers (mean score of 4.61) were more likely to say this than managers (mean score 4.03), (Appendix, Table 28). In second place, almost half of the respondents ranked 'developing staff' (47%) as a skill that they should have learnt. Managers (mean score 4.00) thought this more than top managers (3.74).

(e)   Writers and theorists

Over a third (36%) of respondents said they had been influenced by a writer or book. Top manager respondents (50%) said this more often than managers (29%). The books that were quoted as being influential have been analysed into four categories as: 'established management', 'textbooks' that are usually found on business or other courses, 'topical or recent' publications at the time of the survey and 'classical' books, (Appendix Table 29). At least twelve respondents said that they been influenced by the established management guru Peter Drucker, and twelve nominated the authors who were topical when the survey was conducted, Peters and Waterman. These responses represent a considerable shortfall from the 79 gurus that could have been nominated.[56] Few respondents had been influenced by theories or theorists, (Appendix, Table 30).

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[56] J. H. Boyett and J. T. Boyett, *The Guru Guide, The Best Ideas of the Top Management Thinkers* (1998), pp. viii-ix.

(f)   <u>Motivating managers</u>

This section examines the issue of motivating managers as perceived by top manager and manager respondents themselves. It does not embrace the theories of motivation but aims to identify differences of opinion between top managers and managers as to which factors inspire managers.

It can be seen from Table 4 that top manager respondents thought that managers were motivated primarily by 'recognition for work well done' (mean score 4.41), although the form of recognition, whether praise or some other reward, was not specified in the question. Tangible monetary recognition was ranked in second place with 'performance pay and rewards' (mean score 4.33). 'The right to manage' (mean score 4.23) secured third place in the top managers' ranking, followed in fourth place by 'more responsibility' (mean score 4.21). Ranked in fifth place was 'more freedom of action' (mean score 4.16) and in sixth place were 'able superiors' (mean score 4.09), (Appendix, Table 31).

Manager respondents mentioned the same six motivators that top managers had selected, but in a different order. At the top of their list, ranked in first place, was the competence shown by the people above them, 'able superiors' (mean score 4.36), followed, in second place by 'recognition for work well done' (mean score 4.34). In third place managers selected 'the right to manage' (mean score 4.17). Ranked in joint fourth place were 'performance pay and rewards' and 'more freedom of action' (mean scores 4.11 each), finally, managers selected as their sixth motivator 'more responsibility' (mean score 4.02).

Table 4

Motivating Managers - Motivators

Motivator	Most/ Fairly %	Not at all/Not very %	Net impor-tance ± %	TM	Mgr.	All
	Level of Importance			**Mean scores**		
Recognition for work well done	85	2	83	4.41	4.34	4.36
Able superiors	81	2	79	4.09	4.36	4.28
Right to manage	78	4	74	4.23	4.17	4.19
Performance pay and rewards	75	2	73	4.33	4.11	4.18
More freedom of action	81	5	76	4.16	4.11	4.12
More responsibility	76	2	74	4.21	4.02	4.08
Feedback	69	7	62	3.81	3.99	3.93
Respect [but, "this has to be earned"]	55	11	44	3.62	3.67	3.65
Bonuses	48	14	34	3.72	3.45	3.54
Pension	49	15	34	3.37	3.60	3.53
Salary differentials	48	20	28	3.26	3.46	3.40
Fewer reporting procedures	46	19	27	3.53	3.32	3.38
Planned personal development	47	12	35	3.26	3.32	3.30
Fringe benefits, Co. car, health ins.	46	16	30	3.43	3.14	3.24
Clear career path	41	28	13	3.23	3.11	3.15
Security	32	26	6	2.83	3.20	3.09
Status	33	23	10	3.31	2.95	3.06
Prestige	27	29	-2	3.26	2.80	2.94
Freedom from union-employer agreements	25	42	-17	2.93	2.62	2.72
Annual increments	14	39	-25	2.33	2.49	2.44

Source: Appendix, Table 31.

Top managers thought more strongly than the manager group that their managers were motivated by such financial rewards in the form of 'performance pay' (mean 4.33), 'bonuses' (3.72) and 'fringe benefits' (3.43). But fewer managers supported them (4.11, 3.45 and 3.14, respectively). Manager respondents were more supportive of 'pensions' (3.6) and 'salary differentials' (3.46) than the top manager group (3.37 and 3.26, respectively).

In a 1997 survey[57] managers were asked to what extent they would be motivated by such factors as 'cash bonus' and 'performance-related pay'. Some eight in ten

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[57] K. Charlesworth, *A Question of Balance? A survey of managers' changing professional and personal roles* (March 1997), The Institute of Management, p.45 and p.67.

(84%) said they would be motivated 'to a great extent' (29%) or 'to some extent' (55%) by 'cash bonuses'. This compares[58] with less than half (48%) of the ESI manager respondents who thought that bonuses were 'most' or 'fairly important'. On the question of 'performance-related pay', some eight in ten (82%) of the Institute of Management (IoM) respondents thought they would be motivated to 'a great extent' (30%) or 'to some extent' (52%) by this benefit. This finding is similar to three-quarters (75%) of the ESI respondents who thought 'performance pay and rewards' were 'most' or 'fairly important' motivators.

(g)   Allocation of time spent at work by respondents

In depth studies of managerial work activities[59] have used a number of methods to collect data, for example, by the use of diaries and by observation so that data collection was practically spontaneous. Such studies ranged from just three manager respondents to as many as 160 over periods varying from six days to 3,200 days respectively. Conversely, ESI respondents were asked to rely on their recollection of the amount of time they had spent on a predetermined list of activities during the course of a week.

How ESI respondents allocate their time at work

The time that respondents spent at work on some activities encroached and used a far greater amount of their time than others, for example: activities that took ten hours a week or more included 'meetings' (56%), 'writing/drafting' (30%), and

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[58] These comparisons must be treated with caution because the questions and the predetermined factors were not exactly the same. The ESI managers were given a list of multiple and varied motivators whereas the Institute of Management survey restricted its question to monetary or share option rewards.

[59] H. Mintzberg, *The Nature of Managerial Work* (1973), p.22.

'critical reading' (24%). The distribution of activities undertaken by top manager

and manager respondents alike was remarkably similar, except for

'writing/drafting' and 'meetings'. Over half the respondents (52%) spent up to six

hours a week, or one hour per day, on all of the activities listed, with the exception

of the computer, (Appendix Tables 38a, 38b, 38c).

The most important activities carried out by respondents can be classified as

planning ('thinking'), followed by preparation ('critical and immediate reading' and

'writing/drafting') and communication ('using the telephone' and 'meetings').

Although this analysis would possibly be criticised by Mintzberg[60] as following

the 'Classical School' of managerial activities,[61] 'because they [POSDCORB]

describe certain vague objectives of managerial work'. However, he admitted that

POSDCORB tends to remain in popular use. Mintzberg described some ten

managerial roles that he felt encompassed the identifiable activities undertaken by

chief executives,[62] which included such legitimate activities as ceremonial

engagements and mail handling that were not included in the ESI study.

However, Mintzberg's chief executives did not appear to travel or to use the

computer, whereas 'travelling' occupied up to six hours a week of almost half

(48%) of the ESI top manager respondents, and a quarter (25%) said they used the

'computer' for up to six hours a week, (Appendix, Table 38b).

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[60] Ibid., p.9.

[61] These activities, which are summarised by the acronym POSDCORB, are: Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting.

[62] Mintzberg, *Nature of Managerial Work* (1973), pp.9-10 and pp.92-93.

How ESI respondents rate the usefulness of their work activities

The activities that ESI respondents rated the 'most' or 'fairly useful', were the same as those on which the most time was spent. It can be seen from Table 5 that respondents ranked 'thinking' (86%) as the 'most' or 'fairly useful' activity. 'Critical and immediate reading' (77%) was ranked as the second most useful activity, followed by, in third place, 'using the telephone' (72%) and in fourth place 'writing/drafting' (70%). A half (49%) of the respondents nominated 'meetings' (49%), (Appendix Table 39).

Table 5

The usefulness of work activities

Activity	Useful		Mean scores		
	Most/ fairly %	Not very/ least %	TM	Mgr.	All
Thinking	86	1	4.54	4.52	4.52
Reading: critical and immediate	77	2	4.02	4.09	4.07
Writing/drafting	70	4	3.85	4.10	4.02
Telephone	72	4	4.03	4.02	4.02
Meetings	49	11	3.28	3.68	3.56
Dictation	42	19	3.55	3.32	3.40
Reading: background	40	14	3.44	3.18	3.27
Representational duties ①	27	28	3.00	3.16	3.11
Computer	11	24	2.76	2.40	2.51
Travelling	7	67	1.87	1.75	1.79

Notes: ① Representational duties were defined in the questionnaire as follows: 'When you attend meetings outside your organisation but you are representing your organisation, e.g. meetings with Government, Local Authorities, manufacturers and suppliers etc.'
Source: Appendix, Table 39.

How ESI respondents allocate their time to meetings at work

The nationalised electricity industry was a federal bureaucracy that appeared to function through a highly organised and structured system of meetings and procedures. Respondents were asked about the time they spent on different types of meetings and how useful it was to attend such meetings. The most common amount of time spent on a range of different types of meetings was 1-3 hours each

week by three in ten (30%) respondents. Some respondents were involved for longer periods each week, (Appendix Tables 40a, 40b, 40c).

How ESI respondents rate the usefulness of their meetings at work

The majority of respondents considered that the most useful meetings were those informal, ad hoc meetings held in the office (83%). Not one respondent thought these meetings were a waste of time. Top managers (mean score 4.45) valued such meetings more than managers (mean score 4.39). Ranked in second place were 'meetings with individual managers/individual staff on specific problems' (79%), followed by 'meetings with groups of managers/staff on specific problems' (69%). A summary of the most useful meetings is presented in Table 6, (the full results are analysed in the Appendix, Table 41).

Table 6

The usefulness of meetings

	Very/ fairly useful %	Not very/least useful %	All mean	TM mean	Mgr. mean
In office (informal), ad hoc	83	0	4.41	4.45	4.39
With individual [managers] staff on specific problems	79	2	4.43	4.36	4.46
With groups of [managers] staff on specific problems	69	1	4.29	4.31	4.27
[Executive] Meetings with Chief Officers	57	6	4.03	4.09	4.00
[Board Meetings] Meetings with other mgrs.	59	6	3.95	3.77	4.03

Note: Variations in statements asked of top managers are distinguished by enclosing the alternative wording for top managers in square brackets [ ].
Source: Appendix, Table 41.

(iii) Management selection and succession

In making decisions about selecting managers for posts, managers and leaders will look for certain characteristics, or qualities, in potential candidates. Managers and top managers alike will be aware that the opportunities for promotion are limited by the length of time that top managers remain in post. But issues such as the

qualities possessed by managers, and the tenure of senior management, are inconsequential if they are not based on plans for management succession. This section is examined in three parts: (a) the qualities held by managers and leaders; (b) top management tenure; and (c) plans for management succession.

(a)   The qualities held by managers and leaders

Instead of being given a prompt list of qualities that managers and leaders might possess, respondents were asked to define the qualities spontaneously themselves. It can be seen from Table 7 that top manager respondents wanted managers with 'people skills' (33%), who were 'motivated' (26%), had 'intellectual competence' (26%), 'integrity' (23%), 'job knowledge' (21%), 'leadership skills' (21%) and 'enthusiasm' (21%). Manager respondents perceived that the qualities desired in a manager were, primarily, to be a 'good motivator' (35%), followed by 'good communication skills' (26%), supported by 'job knowledge' (20%), 'leadership skills' (20%) and 'clarity of purpose' (20%), (Appendix, Table 42).

Table 7

The Perceived Qualities of a Good Manager

	TM	Manager	Difference TM-Mgr.
	%	%	± %
People skills / ability to get on with people/interpersonal skills	33	17	+16
Motivator/good motivator of staff/self-motivated	26	35	- 9
Intellectual competence/ability/intelligence with common sense/agility/grasp	26	13	+13
Integrity/honesty	23	15	+ 8
Knowledge/of job/essential knowledge/relevant	21	20	+ 1
Leadership skills	21	20	+ 1
Enthusiasm	21	8	+13
Good communicator/communication skills	14	26	-12
Clarity of purpose/vision i.e. ability to assess problem and take right decision	9	20	-11
Achiever/goal achiever	5	17	-12
Receptive and a good listener	0	18	-18

Source: Appendix, Table 42.

The greatest differences between the two groups of respondents, where the nominations from top manager respondents exceeded those of manager respondents, concerned 'people skills' (plus 16 percentage points), 'intellectual competence' (plus 13 points) and 'enthusiasm' (plus 13 points). Conversely, manager respondents opted for a quality not nominated by top managers, that is someone who was 'receptive and a good listener' (minus 18 percentage points). Manager respondents also specified the need to be a 'good communicator' (minus 12 points) and an 'achiever' (minus 12 points) who had 'clarity of purpose' (minus 11 points).

Asking respondents about the qualities that a good leader should possess also had implications for top management succession. The top managers would use their own experiences and perceptions of leadership qualities in addition to the qualities that they looked for in potential leaders. In making their decision about leadership qualities, manager respondents would, no doubt, draw upon their own experience of ESI top managers and their knowledge of other industrial and business leaders' successes and failures. The qualities proposed by respondents for leaders were similar to those specified for managers. Some respondents, one in five top managers (21%) and one in six managers (16%), stipulated that they expected the qualities for leaders and managers to be the same. However, this contrasts with the view that:

> *managers and leaders are very different kinds of people. They differ in motivation, personal history, and in how they think and act.* [63]

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[63] A. Zaleznik, *Managers and Leaders: Are They Different?* (March-April, 1992), Harvard Business Review, p.127.

The type of qualities that respondents regarded as most important for leaders concerned not business or commercial awareness but interactive people skills, good communications and enthusiasm that motivated others, supported by integrity. Top managers and managers did not always share the same view about the qualities that a good leader should possess. The three important qualities desired in a good leader by top management respondents, were 'good communication skills' (23%), 'enthusiasm' (23%) and a 'good motivator of staff' (19%). Manager respondents, on the other hand, placed prime importance on a leader being a 'good motivator' (34%), followed by having 'good communication skills' (30%), the 'ability to get on with people' (26%) and to 'lead from the front or by example' (20%).

The differences in opinions between the two groups, analysed in Table 8, are revealed in the top manager respondents desire for 'enthusiasm' (plus 13 percentage points). On the other hand, they were less inclined than managers to subscribe to a leader who was a 'good motivator' (minus 15 percentage points), who had 'people skills' (minus 12 points) or who 'led by example' (minus 13 points), (Appendix, Table 43).

Table 8

Qualities desired in a Good Leader

	TM %	Mgr. %	Difference TM-Mgr. ± %
Good communicator/communication skills	23	30	-7
Enthusiasm	23	10	+13
Motivator/good motivator of staff/self-motivated	19	34	-15
Integrity/honesty	16	8	+8
People skills / ability to get on with people/interpersonal skills/concern for people/talk to people/ walking the job	14	26	-12
Clarity of purpose/vision- i.e. ability to assess problem and take right decision/lucid	14	16	-2
Personality/charisma/character/well rounded personality/presence	12	15	-3
Leadership skills/lead by example/lead from front	7	20	-13

Notes: The data columns are sorted in order of importance to Top Managers.
Source: Appendix, Table 43.

(b)   Top management tenure

Whereas in the private sector the appointment of board members was regulated by the Companies Act, the appointments and tenure of ESI board members were determined by the appropriate Minister. The appointments of ESI full-time board members were usually for a fixed period of some five years, 'but the Minister has set varying periods of less than five years for re-appointments'.[64] Board members were assured of their jobs for known fixed periods, which was not always the case in the private sector. Such fixed periods could be seen as a disadvantage in the sense that the more time that top managers spent in their posts, by implication, resulted in fewer opportunities for management succession. On the other hand, fixed periods for top management might be regarded as ensuring periods of stability. ESI respondents were asked to give their opinions about the length of time chairmen and other top managers should remain in their posts.

The largest proportion of respondents thought that three to five years was the maximum period of office to be occupied by chairmen (36%), deputy chairmen (50%) and chief officers (38%). Perhaps not surprisingly, there was a difference of opinion among top manager and manager respondents concerning the length of time chairmen should remain in post. Seven in ten (69%) top managers thought chairmen should remain in post for either 6-9 years (38%), or longer (31%). Conversely, four in ten manager respondents (43%) thought chairmen should remain in post for five years or less. None thought they should remain in post for ten years, (Appendix, Table 34). The reality, in the private sector, was that chief

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[64] Herbert Report (1956), p.83.

executives held on to their posts for some five to six years. A survey[65] conducted in 1993, among *The Times* 1,000 top companies, found that the average tenure for chief executive officers (CEOs) was around five and a half years. In the case of deputy chairmen, ESI top managers (50%) and managers (51%) shared similar views, that 3-5 years was the most suitable time for deputy chairmen to remain in office, (Appendix, Table 35). Both groups also considered 3-5 years was an adequate period for senior executives to remain in post and top managers (44%) were more likely to think this than managers (35%), (Appendix, Table 36).

(c)   Plans for management succession

Some one in five manager respondents (21%) said they had no knowledge of plans for management succession in their organisation. Two thirds (66%) said either that they either had no responsibility for management succession plans (32%); or that they were not involved in such plans (34%), (Appendix, Table 46).

Table 9 shows that the most common technique, mentioned by seven in ten respondents, was to have a 'management inventory' (69%). Other methods mentioned included 'individual plans for those with senior management potential' (59%), 'organisation charts for management development' (57%) and 'individual plans for those with management potential' (56%). There were considerable differences between the two groups of managers. Top manager respondents used the 'management inventory' (87%), which was nominated by six in ten managers (60%). Almost nine in ten top managers (87%) used 'individual plans for those with senior management potential', but fewer manager respondents (45%) were

[65] M. J. Conyon, *Tenure and Contracts: The Experience of UK CEOs* (1994), Personnel Review, Vol. 23 No. 5, pp.25-33.

aware of the use of this technique. Eight in ten top managers (80%), compared with less than half of the managers (46%), said they had 'organisation charts for management development'. Two-thirds of top managers (67%) also had 'individual plans for those with management potential'; half the managers (51%) were aware of these plans, (Appendix, Table 46).

Table 9

Techniques for Planning for Management Succession

Techniques for planning for management succession	All %	TM %	Mgr. %	TM-Mgr. ± %
Management inventory	69	87	60	+13
Individual plans for those with senior management potential	59	87	45	+32
Organisation charts for management development	57	80	46	+34
Individual plans for those with management potential	56	67	51	+16
Organised talent spotting	34	53	25	+28
Long term estimates of future management requirements	31	44	25	+19
Short term surveys of the management position	29	42	23	+19
Named successors	17	20	16	+ 4

Source: Appendix, Table 46.

Surprisingly, the key elements of management succession, such as plans for the longer term view and short term monitoring of the up to date position, were of lesser importance. Some four in ten top managers and a quarter of managers said that their organisations used these techniques; and one in five top managers (20%) used 'named successors'. Just one in six managers (16%) were aware that this method was employed in their organisation. Comparisons between the two groups of respondents should be treated with caution because top managers mentioned the techniques that were implemented in their organisations and the manager respondents most probably worked in another. With this cautionary note in mind, the final column of Table 9 shows the differences between the two groups. It can be seen that the greatest differences concern the use by top manager respondents of organisation charts (plus 34 percentage points), individual

plans for those with senior management potential (plus 32 points), and organised talent spotting (plus 28 points).

Top manager respondents were asked how they ensured that plans for management succession were carried out. It can be seen from Table 10 that a half of them (50%) said that they regularly reviewed, monitored and discussed such plans. A third mentioned personal involvement with the deputy chairmen only, or with the deputy chairman and chief officers (32%), (Appendix, Table 47).

Table 10

Ways Top Managers ensure Management Succession Plans are Executed

Top Managers only	No.	%
Regular review/regular monitoring/regular discussion/regular audit	19	50
Personal attention/involvement/contact with deputy chairman and chief officers /deputy chairman	12	32
Selective development scheme/development panel/committee	4	11
Annual review	4	11
Chief officers and training officers	2	5
Mentors	1	3
Delegation	1	3
Management appraisal and development	1	3
Personal initiatives to create secondments, career moves to prepare people for possible future vacancies	1	3
Total responses	45	
Total respondents	38	100%

Source: Appendix, Table 47.

Centralised plan for management succession

Some 25 of the 42 top managers said they participated in an industry-wide plan for management succession and nineteen top managers said they made recommendations to the plan. Seventeen of them said such a plan did not exist. The industry plan was a secret plan and may have been the reason that some executives gave a negative response.

The criteria most frequently mentioned by the nineteen top managers for making recommendations were 'ability' by 7 top managers (37%), 'potential' (26%) and 'performance' (26%), (Appendix, Table 48).

The recommendations were discussed by around three in ten with the chairman (31%), or managing director/deputy chairman (28%). Some contacted other directors (16%) or held discussions in committee or with the appropriate directorate (13%). Two chairmen and one director said that they discussed their recommendations with the central body at the Electricity Council, (Appendix, Table 49).

(d)   Selecting managers for posts

Here again (see Table 7 above) respondents selected the factor through which organisations succeed or fail, the implicit recognition that success depends on the work carried out by organisations' employees. Thus, it was crucially important that managers were able to recognise and to harness employees' abilities and 'motivate' them to give of their best. It can be seen from Table 11 that almost all (99%) of the respondents said this was 'very' or 'fairly' important. However, managers needed to support the ability to motivate with 'drive' (85%), 'intelligence' (86%), and the 'ability to think' things through (86%). They needed 'enthusiasm' (84%), 'knowledge' (81%) and the 'ability to get on with others' (83%), (Appendix, Table 51).

Table 11

Importance of specific factors in selecting managers

Factor	Importance		Responses		Mean Scores		
	Very/ Fairly	Not/ Very/ at all	All replies Total	No reply Total	All replies	TM	Mgr.
	%	%	No.	No.			
Ability to motivate staff	99	0	140	9	4.77	4.70	4.80
Drive	85	2	136	13	4.26	4.37	4.20
Intelligence	86	1	137	12	4.26	4.33	4.23
Thinking ability	86	1	139	10	4.27	4.26	4.27
Enthusiasm	84	1	140	9	4.29	4.20	4.32
Knowledge	81	1	137	12	4.13	4.14	4.13
Ability to get on with others	83	0	139	10	4.18	4.07	4.23
Track record	75	1	135	14	4.08	4.07	4.09
Innovatory skills	78	4	136	13	3.98	4.07	3.94
Problem solving	80	1	136	13	4.18	4.00	4.26

Source: Appendix, Table 51.

For these respondents, hobbies/leisure activities were not a priority for the whole rounded individual that was important in the years following nationalisation. In an IoM survey,[66] some five thousand members were asked to select from a list of fourteen factors the three most important that had contributed to their career success. They nominated 'determination' (38%), 'interpersonal skills' (31%), 'ambition' (30%), 'luck' (26%), 'integrity' (25%), 'relevant skills' (25%) and 'breadth of experience' (24%). With the exception of 'luck', most of these factors were either spontaneously nominated by ESI respondents (Appendix, Table 42) or were selected by them (Appendix, Table 51). It is interesting to note that 'concern for results', nominated by just 17 per cent of the IoM survey, was not a factor considered by ESI respondents. 'Qualifications' were mentioned by just 15 per cent of IoM respondents, whereas over half (56%) of the ESI respondents thought qualifications were important in selecting managers; although it was ranked in fifteenth place among the twenty-five factors on the list.

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[66] Charlesworth, *A Question of Balance?* (1997), p.34.

(iv)   Privatisation

In the final section of the questionnaire respondents were asked for their opinions about the electricity industry which was facing the prospect of privatisation. They were asked, first of all, their opinions about (a) criticisms that had been made about the industry and (b) the obstacles to effective management in a nationalised industry. The third part of this section (c), concerns the potential effect of privatisation on the electricity industry and (d) the managerial skills needed for privatisation that were not possessed by nationalised industry managers.

(a)   Criticisms of the electricity industry

Respondents were given the opportunity to respond to ways in which the electricity industry had been criticised. Respondents were found to be critical of the committee and reporting procedures that existed, and would thus respond positively to changes in existing administrative and management procedures. It can be seen from Table 12 that the majority of respondents (85%) thought that there were too many committees. A view supported by more top managers (mean score of 4.55) than managers (mean 4.16). Three-quarters of respondents (74%) wanted a shorter chain of command, top managers (mean score 4.31) more than managers (3.83). Some six in ten (63%) thought there were too many levels of management, which supports the shorter line of command mentioned above. Top managers (mean score 3.9) were more likely to support this than managers (mean 3.59). Almost six in ten (58%) agreed that there were too many rules and procedures. Top managers were slightly more in agreement (mean score 3.76) than managers (mean 3.69), (Appendix, Table 52.)

Table 12

Agreement/Disagreement with criticisms towards the ESI

Statement	Strongly agree %	Strongly disagree %	Total replies No.	All mean	TM mean	Mgr. mean
There are too many committees	85	5	138	4.28	4.55	4.16
The line of command should be shorter	74	15	138	3.98	4.31	3.83
There are too many levels of management	63	18	138	3.69	3.90	3.59
There are too many rules and procedures	58	14	138	3.71	3.76	3.69

Source: Appendix, Table 52.

(b)   Obstacles to effective management

Respondents were asked to select, from a list of predetermined potential influences, the ones that they thought had hindered the electricity industry's effectiveness and, by implication, the management. The majority of pre-defined statements described the different parts of the electricity industry (71%),[67] and the balance concerned ways in which the Government could impose its decisions on the management of the industry's affairs (29%). However, there was less concern from respondents that the ESI's constituent bodies were likely to have had a detrimental effect on the electricity industry. The most dissatisfaction expressed by respondents concerned the way in which the Government's decisions had affected the management decision making in the industry itself.

The greatest difference of opinion between the two groups of respondents concerned the ways in which the government may have influenced decisions affecting the operations of the electricity industry. In particular, the managers' responses to the statements were found to be greater than top manager respondents, with the exception of 'government interference' and 'government

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[67] The seventeen statements listed: the Electricity Council, six components of the CEGB, three components of the Area Boards, the two Scottish Boards and five ways in which the Government may have hindered the ESI's effectiveness, (Appendix, Table 59).

direction on pay'. Top manager (95%) and manager (93%) respondents alike considered that 'Government interference' had hindered the effectiveness of the electricity industry's operations. Some six in ten top managers (62%) and half of the managers (49%) thought the Government's 'direction on pay' had not been helpful. Manager respondents (82%) felt more strongly than top manager respondents (43%) about the hindrance of the 'Government's direction on fuel for power stations'. Again, manager respondents (75%) felt more strongly than top manager respondents (32%) about the issue of 'government direction on the type of power stations to be built'. On the issue of government selection of ESI top management, almost half the managers (46%) and one-third of top managers (32%) were concerned that the Government's role in the selection of ESI top management could have affected the ESI's operations. The difference between the top managers and managers was a net score of minus 14 percentage points, (Appendix, Table 59). Table 13 shows the statements that received the highest number of responses. The difference between the top manager and manager respondents is shown in the last column.

Table 13

Influences on the Effectiveness of the ESI

Which of the following have hindered ESI effectiveness?	All	TM	Mgr.	TM-Mgr.
	%	%	%	+/- %
Government interference	93	95	93	+2
Government direction on pay	53	62	49	+13
Government direction on fuel for power stations	70	43	82	-39
Electricity Council	29	41	24	+17
Government direction on type of power stations to be built	62	32	75	-43
Government selection of ESI top management	42	32	46	-14

Source: Appendix, Table 59.

(c)   The potential effect of privatisation on the electricity industry

It can be seen from Table 14 that respondents perceived that privatisation would

result in changes that emphasised 'profit making' (99%). There would also be

changes in 'management style' (88%), the need for 'new managerial skills' (88%)

and the *raison d'être* for the nationalised ESI, the 'corporate objective', [68] would

change (85%). There would be 'performance pay and rewards' (84%),

'organisational changes' (83%), and there would be a 'need to buy in managerial

skills' (70%), (Appendix, Table 54).

Table 14

The effect of privatisation

	Agree/ Strongly %	Disagree Strongly %	Mean scores All	TM	Mgr.
More emphasis on profits	99	0	4.57	4.55	4.58
Need for new managerial skills	88	4	4.26	4.34	4.22
Introduction of performance pay & rewards	84	4	4.08	4.30	3.98
Organisational changes	83	0	4.29	4.23	4.32
Need to buy in managerial skills	70	14	3.81	4.23	3.61
Changes to the ESI's corporate objective	85	5	4.11	4.19	4.07
Changes in management style	88	2	4.15	4.07	4.19

Source: Appendix, Table 54.

Differences between top managers and managers

The greatest differences between the two groups of respondents concerned 'the

need to buy in managerial skills', top managers (mean score 4.23) thought this

more than managers (mean score 3.61). Top managers, too, perceived that

'performance pay and rewards' (mean score 4.3) would be introduced with

privatisation but fewer manager respondents agreed (mean score 3.98). Managers

on the other hand, highlighted 'more cost cutting' (mean score 4.13) and 'increased

delegation to lower management' (mean score 3.54) more than top managers

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[68] This objective stated that the industry would deliver an economic and continuous supply of electricity to all its customers.

(mean scores 3.73 and 3.34 respectively). Table 15 below shows the difference in the level of agreement between top managers and managers over the statements about privatisation. The negative sign indicates that a higher proportion of managers, than top managers, selected these statements, (Appendix, Table 55).

Table 15

Differences between Respondents' Scores
Perceptions of the effect of Privatisation

Top Managers level of agreement with these statements is <u>higher</u> than managers	Mean Score difference
Need to buy in managerial skills	0.62
Introduction of performance pay & rewards	0.32
Penalties for targets not met	0.13
Decentralisation of decision making	0.13
Need for new managerial skills	0.12
Changes to the ESI's corporate objective	0.12
Increased risk taking	0.12
Weakening of oral communications network	0.10
Less need for national agreements	0.07
Fewer internal meetings	0.06
More freedom in decision making	0.05

Top Managers level of agreement with these statements is <u>lower</u> than managers	Mean Score difference
More cost cutting	-0.40
Difficulty in maintaining the ESI's corporate objective	-0.22
Increased delegation to lower management	-0.20
Increased flexibility from staff	-0.19
Loss of synergy	-0.19
Less paperwork generated	-0.18
Less form filling	-0.14
Changes in management style	-0.12
Organisational changes	-0.09
More meetings with bodies external to ESI	-0.09
Fewer training facilities	-0.09
More direct action	-0.06
Less mobility for staff	-0.04
More emphasis on profits	-0.03

Source: Appendix, Table 55.

(d)   Managerial skills needed for privatisation

Respondents were asked whether managers in a privatised organisation needed qualifications or knowledge that were different from those utilised in a nationalised environment. There was no prompt list. Almost six in ten (58%)

respondents thought managers did need additional skills. A third of these were top managers (36%) and two-thirds were managers (64%). The most important skills that respondents perceived to be lacking in the managers' portfolios concerned corporate finance and shareholder relations. At least half of them (49%) specified that managers needed to know more about finance in such areas as 'corporate finance/financial contracts/financial control/financial PR'. Over half of top manager respondents (55%) thought this, compared with less than half of the managers (46%). Top managers (29%) were concerned that managers had no experience in dealing with shareholders and mentioned 'shareholders/shareholder admin/shareholder relations' but none of the managers mentioned this activity. Conversely, almost a quarter of managers (23%) foresaw that knowledge about the competitive market environment was an important future skill that they lacked but none of the top managers mentioned this factor, (Appendix, Table 56). Table 16 shows the most important qualifications that respondents believed were necessary for managers to work in a privatised organisation.

Table 16

**Qualifications managers need to work in a privatised organisation
that are different from working in a nationalised organisation**

	TM %	Mgr. %	TM-Mgr. +/- %
Shareholders/shareholder admin/shareholder relations	29	0	+29
Corporate finance/financial contracts/financial control/financial PR	55	46	+9
Treasury/taxation	19	12	+7
Competitive market/commercial culture/market orientated	0	23	-23

Source: Appendix, Table 56.

Summary to 6(b)

Some 149 ESI respondents, comprising top managers and managers, participated in this survey. While both groups of respondents shared similar profiles, they differed from their private sector counterparts in their length of service, age,

education and academic achievements. In particular, three-quarters of the ESI group had attended grammar school compared with half the BIM group but few had attended public school. They held more first and higher degrees than BIM respondents but fewer ESI respondents held the DMS. The period of ESI training was found to be longer than externally trained respondents. In their career development, top manager respondents were more likely to have attended external courses than managers.

Top manager and manager respondents selected the same top factors for motivating managers but in different orders. Manager respondents selected 'able superiors' as most important, top manager respondents selected 'recognition for work well done'.

The question of what managers do, their most important work activities, were classified as planning, preparation and communication, which represent the 'classical' school of managerial activities summarised by the acronym POSDCORB.

Some respondents thought there was no difference between the qualities needed to be a leader or a manager. For leadership skills they selected not business or commercial awareness but interactive people skills, good communications and enthusiasm that motivated others and was supported by integrity.

The largest proportion of respondents thought that 3-5 years was the maximum period of office for chairmen, deputy chairmen and chief officers. Not surprisingly there were differences between the two groups of respondents.

The key elements of management succession: plans for longer term view and short-term monitoring of the up-to-date position, were found to be of lesser importance. Manager respondents were less aware of techniques that might be in use for management succession.

Top managers were more mobile than managers. Not only did top managers pass through more electricity boards than managers but they also engaged in activities that enabled them to mix with a broader range of their peers by attending external courses or handling a project in another board.

Top manager and manager respondents differed, too, in the type of qualities that they looked for in a manager. However, whether seeking qualities in managers or leaders, or selecting managers for posts, respondents put aside business or commercial skills and gave prominence to people skills. Moreover, they perceived that the skills they were lacking on the eve of privatisation concerned the lack of knowledge about corporate finance and shareholder administration or relations.

Part 3 begins by recalling the trail of the research through Parts 1 and 2, and outlines the structure for the final stage of this investigation.

PART 3. MANAGEMENT SUCCESSION: EXECUTIVE MEN AND NON-EXECUTIVE WOMEN

Part 1 began by examining the context of women in paid employment and the reasons for their failure to reach top management posts. An investigation into the source of ESI potential managers followed, which examined the procedures for recruitment, training and career development. Part 2 investigated the development and progression of ESI managers. This final part explores the characteristics of ESI top management and whether there was exclusion of women during the management stage that restricted their access to executive positions. Chapter 7 examines the industry's leadership portfolio. Chapter 8 explores the role of non-executive directors. Chapter 9 investigates attitudes to the employment, recruitment and development of females in the ESI, and Chapter 10 considers the acquisition by women of top positions in the ESI.

> *The* [electricity] *industry's success depends in the last resort on how efficient are the men who run it and how skilled are their leaders in managing men with widely differing backgrounds and varied qualities and qualifications.* [1]

Qualifications, especially technical qualifications, were a key asset to career progression in the ESI. There were no female top managers in the ESI, and the historical reasons why females were not encouraged to pursue subjects that would lead to the acquisition of technical qualifications were discussed in Chapter 1. A study,[2] published in 1971, of working women, who were members of the Institute of

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[1] Herbert Report (1956), p.42.
[2] Fogarty [et al], *Women in Top Jobs* (1971).

Directors, showed that female directors had gained their board appointment either from promotion (44%) or had started their own company (32%). In companies that employed up to 100 (52%), or 100 to 500 (32%) people, they held such posts as chairman (28%), managing director (44%), or company secretary (20%).[3] A comparison with ESI top management reveals differences in their educational and professional qualifications. In the following investigation it will be shown that the majority of ESI top managers held some form of qualifications compared with half (52%) of the working women directors. In 1971 half (49%) of ESI top managers held a degree (Table 11 below) compared with a quarter (26%) of female directors; and over half (54%) held professional membership of the IEE alone (Table 15), compared with one in seven (14%) female directors with professional qualifications. However, it will be shown in Chapter 8 (Table 3), that the females who were appointed as ESI part-time Board members, were better qualified than their male counterparts.

Chapter 7. Executive Men: The Results of Management Succession in the Electricity Industry

This chapter is divided into two parts: section (a) concerns the ESI's first leaders from nationalisation in 1948, and section (b) analyses ESI leadership over three decades from 1961-1991. Section (a) begins by examining (i) the selection and appointment of the first leaders. This is followed by an analysis of commonly shared attributes including: (ii) personal characteristics; (iii) educational attainments; (iv) membership

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[3] Ibid., pp.141-3.

of professional institutions; and (v) their careers.

(a) 1948, nationalisation and the ESI's first leaders

The first leaders of the electricity industry in 1948 were different from subsequent leaders because they led a united industry that had previously comprised around 600 small companies, local authorities and municipalities. They were responsible for ensuring employee development and management succession.

(i) Their method of selection and appointment

In 1946 Prime Minister Attlee appointed Lord (formerly Sir Walter) Citrine[4] to the Chairmanship of the ESI. Attlee described to Citrine his perception of the relationship between the British Electricity Authority and the proposed fourteen Area Electricity Boards. In May 1947, the Organisation Committee was established. This Committee was headed by a combination of two former trade union leaders, a civil servant and a chief engineer, together with around six experienced engineers (most of whom occupied managerial positions). These men were responsible for the job of welding into a cohesive organisation the various electricity undertakings that became the nationalised Electricity Supply Industry.[5] Citrine was keen that higher management should build good industrial relations in co-operation with the trade unions.[6] His philosophy, however, was not widely shared and contrasts starkly with the attitude of engineering employers in the shipbuilding industry who were perceived as victimising

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[4] Hannah, *Electricity before Nationalisation* (1979), pp.354-356.

[5] Lord Citrine, *Two Careers* (1967), p.259. See also, Hannah, *Engineers, Managers and Politicians* (1982), pp. 7-9.

[6] Citrine, *Two Careers* (1967), pp.280-281.

employee trade union activists.[7] On the other hand, one of Britain's largest private employers had post-war industrial relations that were 'marked by remarkable continuity and stability'.[8]

The British Electricity Authority

The discussions about which people could form the vanguard organisation, the British Electricity Authority, were decided between Lord Citrine and Emanuel Shinwell the Minister of Fuel and Power.[9] Citrine, in his role as chairman, was supported by two deputy chairmen. One of the deputy chairmen, Sir Henry Self, had experience of large-scale organisations, and was employed in the Air Ministry as Permanent Under-Secretary. The other deputy chairman, Mr John Hacking,[10] was put in charge of the generation of electricity; he was already Chief Engineer of the Central Electricity Board.[11] A fourth person to join the team was Mr Ernest Bussey who relinquished the post of President of the Electrical Trades Union. Twelve people were appointed to the first Board. In addition to the four full-time executives there were five electricity Area Board Chairmen, who each had long experience in the industry.[12] In addition there were three part-time members, one of whom was the first woman to be appointed to a nationalised industry board.

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[7] A. McKinlay, *Management and workplace trade unionism: Clydeside engineering, 1945-1957*, pp.180-185, in J. Melling and Alan McKinlay, 'Management, Labour and Industrial Politics in Modern Europe' (1996).

[8] Fitzgerald, *Rowntree* (1995), pp.410-413.

[9] Citrine, *Two Careers* (1967), p.253. Hannah, *Engineers, Managers and Politicians* (1982), pp.12-13.

[10] Mr Hacking was knighted within a short time of his appointment.

[11] Citrine, *Two Careers* (1967), p.257. Chester, *Nationalisation of British Industry* (1975), p.542. Hannah, *Engineers, Managers and Politicians* (1982), pp.12-13.

[12] Citrine, *Two Careers*. (1967), p.266. Hannah, *Engineers, Managers and Politicians* (1982), pp.13-14.

This first team of ESI leaders may have been different if Lord Citrine had not been selected as the chairman, because some of the people who were asked refused to serve under him.[13] There were also rumours about the restricted nature of the list of candidates and the limitations of those who were on the list, leaving 'untouched reservoirs of talent'.[14] The Ministry perceived certain 'negative characteristics' generally about nationalised industry leaders:

> *The members are not young; there is no element of "the old school tie"; they do not include professional politicians or representatives of the intelligentsia or of legal, banking or big business interests; representation of the Forces is slender; geographical considerations have had little influence.* [15]

On the other hand, positive aspects of these appointments were also recognised:

> *most have already received public recognition in their respective avocations; half have had their main experience in transport and most of the remainder have had some secondary experience in transport matters. Summing up, the Ministry thought the following adjectives appeared appropriate: 'hardworking, experienced, elderly and safe'.* [16]

(ii) Hardworking, experienced, elderly and safe

Certainly the full-time members appeared to have been hardworking judging from their senior positions in their former organisations. In addition, their combined experiences had been drawn from large-scale organisation, industrial relations and engineering. The average age of the full-time members in 1947 was fifty-four years,[17] which was similar to the ages of the board members of the other nationalised

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[13] Hannah, *Engineers, Managers and Politicians* (1982), p.9.

[14] Chester, *Nationalisation of British Industry* (1975), pp.544 and 547.

[15] Ibid., p.542.

[16] Ibid. p. 542. See also T. R. Gourvish, *British Railways 1948-73. A Business History* (1986), pp.31-32.

[17] The author researched the biographical data for each top manager in the electricity industry as part of this PhD thesis. Sources used included: the *Annual Report* of each electricity organisation (31.3.1950). *Electricity Supply Handbook* (2nd ed. 1948), (4th ed. 1951). *Electrical Who's Who* (1950; 1956/57, 1962/63, 1964/65). *Who Was Who* (1951-60, 1961-70).

industries,[18] but relatively young when compared with the average age, 61 years, of the British Transport Commission.[19] They were 'safe'; they had risen to the top of their respective jobs and gained recognition of a respected profession, the Institution of Electrical Engineers. The full-time members comprised a Lord and two Knights. Lord Citrine had been General Secretary of the Trades Union Congress for some twenty-one years and became a Member of the National Coal Board in 1946, where he was responsible for recruitment, education, training, safety and the miners' welfare. In his early career he had been an apprentice electrician in the electricity industry before he commenced his career as an official of the Electrical Trades Union. He had gained experience in the Coal Board regarding large-scale integration of separate entities into one organisation 'with proper provision for devolution and management'.[20] Both the Knights had been to Universities (London and Leeds) before either entering the Civil Service and rising to become a Permanent Secretary (Self), or taking up an engineering career and rising through the ranks to become a chief engineer and President of the Institute of Electrical Engineers (Hacking). Because of the industry's engineering nature, the Lord and the civil servant were invited to become Companions of the IEE. The remaining full-time member who started his career in a London electrical department became General Secretary of the ETU and was awarded the CBE.[21]

The BEA's part-time board members, who were top managers in their respective

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[18] Chester, *Nationalisation of British Industry* (1975), p. 540.
[19] Gourvish, *British Railways 1948-73* (1986), p.2.
[20] Lord Citrine, *Two Careers* (1967), pp.245-263
[21] Hannah, *Engineers, Managers and Politicians* (1982), p.13.

electricity boards, also provided unusual combinations of experiences, skills, professions and achievements. All held membership of the IEE and some were Justices of the Peace. The LEB chairman (Randall) was a Companion of the IEE, a Fellow of the Chartered Institute of Secretaries and had been awarded the CBE. The MEB chairman (Alderman Lewis) had served an electrical engineering apprenticeship and had, like Citrine, joined the ETU, became involved with Birmingham City Council, was a Justice of the Peace, a Companion of the IEE and had been awarded the CBE. The Manweb chairman (Eccles) had, at age of twenty, joined an electric company, and rose to become the Liverpool City Electrical Engineer. He attained a BSc, and was a member of the Institutions of Electrical, Civil and Mechanical Engineers. The chairman of the SW Scotland Electricity Board, formerly employed by the Yorkshire Electric Power Company, had attended Manchester University, obtained a BSc, become a member of the IEE and was a Justice of the Peace. The three external part-time board members who were not employed by the ESI, nevertheless brought with them specialist expertise to benefit the industry. They comprised Dame Caroline Haslett, who was Secretary and Director of the Electrical Association for Women; Sir William Walker, the chairman of the National Joint Industrial Council (covering the terms and conditions of manual workers) and the National Joint Board (covering engineers); and Colonel E H E Woodward, Director and General Manager, North Eastern Electricity Supply Company Limited.

Other leaders of the ESI

In addition to the British Electricity Authority the electricity industry consisted of some fourteen newly established electricity boards that were each responsible for the

supply of electricity within its region. There were twelve such boards in England and Wales and two in Scotland. Each of the Area Electricity Boards had its own management structure, which comprised a chairman, deputy chairman, chief engineer, chief accountant, chief commercial officer, board secretary and some boards, but not all, included an additional member such as a liaison officer.

The people who headed the newly nationalised industry were responsible for the policies and procedures that were laid down for the recruitment, selection and development of staff. They were, implicitly, responsible for management succession and for selecting their own successors. The main characteristics of the first leaders are considered separately from their successors. Their attributes, neatly and aptly summarised by the Ministry as 'hardworking, experienced, elderly and safe', are examined below under headings for age, honours, education, professional status and service. Whether these men were in some way privileged is also considered.

The first leaders: age structure

If seniority were the criterion for succession then one would expect the most elderly to occupy the top posts, and for chief officers to be younger than the top managers. Certainly those holding the highest posts were the eldest. In 1950, the combined (BEA and Area Boards) average age of all full-time members and chief officers was fifty-two years. The Area Board full-time chairmen and deputy chairmen were, on average aged fifty-five years; whereas the chief officers were, on average, younger. Chief engineers were around fifty-two; chief accountants and chief commercial

officers were fifty, while board secretaries were under fifty years old.[22] Some of the top managers were relatively young. A few (3%) were under forty; and one in seven (15%) were aged between forty and forty-four. Some were relatively old at aged sixty-five and over (3%), and one in seven (15%) were aged sixty to sixty-four years old.

Table 1 compares the age groups of ESI top managers with non-ESI top managers, directors and civil servants. It can be seen that the ESI leaders were older than British Higher Civil Servants and non-ESI Top Managers, but younger than the British Directors. Fewer ESI executives were under 40 (3%) compared with the non-ESI study.[23]

Table 1

Ages of Top Managers, Directors, Civil Servants

	Non-ESI			ESI
	Top Managers	British Directors	British Higher Civil Servants	Top Managers
Average age	50	55	50	52
	Proportion in each age group			
	%	%	%	%
Under 40	12	9	17	3
40-49	43	30	29	32
50-59	35	31	42	47
60 and over	10	31	12	18
Total %	100	100	100	100

Note: Columns may not sum to 100 per cent due to rounding.
Source: Acton Society Trust, *Management Succession* (1956), p.7.

Honours and awards

It appeared that a hierarchy of honours existed within the electricity industry, with the most distinguished people appointed to the British Electricity Authority. The BEA

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[22] Ages for the year ending 31 March 1950.
[23] Acton Society Trust, *Management Succession* (1956), p.7.

leaders boasted such honours as Privy Counsellor, Knight Commander Order of the British Empire (2), Knight Commander of the Order of the Bath, Knight Commander, Order of St Michael and St George, Companion of the Order of St Michael and St George, Commander of the Order of the British Empire (2) and a Military Cross.

Of the fourteen Electricity Board leaders, Sir Norman Duke from South East Scotland Board was the most distinguished. The leaders of the England and Wales area boards had been awarded lesser civil honours, which included CBE's (3), and OBE's or MBE's (6). However, what the Area Boards' leaders lacked in higher honours, they made up for with their professional qualifications.

(iii)   Education

Universities, schools of technology or polytechnics

Decisions about careers or taking up employment immediately after leaving school were usually dependent on family circumstances. University was beyond the means of most school leavers, fees had to be paid, either by scholarships or from the student's own funds. Hence Mr Everett's question to the IEE North Midland Centre in 1938, 'are the brains in this country only the preserves of people with money?'[24] There was a financial distinction between the cost of engineering training at a technical college, which cost forty times less than the equivalent university training (£5 per annum at college compared with £200 at university).[25] Educational opportunity did not emerge until 1944 when secondary education was made available to all, and fees in state

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[24] In the general discussion about 'Electrical Engineering Education' which had taken place at the Institution and four Centres between 1937 and 1938, in *Journal* IEE, 1939, Vol. 84, No. 506, p.179
[25] Ibid., p.182

schools in England and Wales were finally abolished. Before that free places were available only for those of exceptional ability.[26] Thus, the electricity industry's first executives were either exceptionally able, had qualified for scholarships, or they came from homes that could pay their fees, or they followed the less costly route to obtaining qualifications through technical schools and colleges, but this route still relied on family support. A study[27] of business leaders, conducted over a seventy year period, found that almost half (46%) of them had a university education, which compares with just over a third (36%) of ESI leaders. Another two in five (39%) ESI top managers attended a technical institution. Table 2 analyses the type of educational institution attended by ESI top managers. Around one in ten (11%) attended both a university and a technical institution. Those who became either chairmen or deputy chairman were more likely to have attended university (56%) or to have had a technical college education (45%), than their chief officers (29% and 36% respectively).

Table 2

Higher Education Institutions attended by Chairmen, Deputy Chairmen and Chief Officers (GB): 1950

Institution	Chairmen and Dep. Chmn.		Chief Officers		All	
	No.	%	No.	%	No.	%
University	18	56	23	29	41	36
Tech. School/College/Polytechnic	15	45	29	36	44	39
Both Univ. and tech. inst. etc.	(6)	(18)	(7)	(9)	(13)	(11)
Sub-total	27	82	45	56	72	64
Unknown/No details available	6	18	35	44	41	36
Total	33	100	80	100	113	100

Sources: *Annual Reports* of each electricity organisation (31.3.1950). *Electricity Supply Handbook* (1948, 1951). *Electrical Who's Who* (1950, 1956/57 1962/63, 1964/65). *Who Was Who* (1951-60, 1961-70).

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[26] J. Westergaard and H. Resler, *Class in a Capitalist* Society (1978), p.192.

[27] P. Stanworth and A. Giddens, *Elites and Power in British Society* (1974), pp.81-85.

A study[28] of non-ESI graduate managers found that one in five (19%) managers had a

degree compared with a small proportion (2%) of the population. It can be seen from

Table 3 that higher degrees were held by more ESI top managers (38%) than those in

the non-ESI study (18%).

Table 3

Type of Degree and Institution (graduates only)

	(1) **Non-ESI Managers** **%**	**(2)** **ESI Top Managers** **%**
Higher degrees:	18	38 (see note)
First degrees only:	82	62
Arts		
Oxford or Cambridge	17	8
Other universities	10	8
Technical and other colleges	N/A	8
Science and applied science		
Oxford or Cambridge	6	3
Other universities	49	30
Technical and other colleges	N/A	5
Total	**100**	**100**
(Number)	(628)	(42)

Notes: ESI - the 38 per cent with higher degrees includes 13 per cent who had been to Oxford & Cambridge. N/A means data Not Available.
Source: Column (1) Acton Society Trust, *Management Succession* (1956), p.8. Column (2) Boards *Annual Reports* (31.3.1950). *Electricity Supply Handbook* (1948, 1951). *Electrical Who's Who* (1950; 1956/57 1962/63, 1964/65). *Who Was Who* (1951-60, 1961-70).

(iv) Membership of Professional Institutions

The ESI top management were highly qualified. Their professional credentials were

the result of years of training for technical or non-technical careers and some of them

had a string of qualifications. It can be seen from Table 4 that the majority (78%) of

ESI executives held professional qualifications compared with two in five (18%) non-

ESI managers.[29] The Table highlights the predominance of the engineering profession

among ESI top managers, and also demonstrates that more top managers held

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[28] Acton Society Trust, *Management Succession* (1956), p.8.
[29] Ibid., p. 12.

accounting and company secretarial qualifications than non-ESI managers.

Table 4

Proportion of Managers with Professional Qualifications

Type of Professional Qualification	(1) Non-ESI Managers %	(2) ESI Top Managers %
Engineering	9	54
Accounting	)combined	13
Secretarial	5)categories	6
Chemists	3	0
Miscellaneous, e.g. architects, legal	1	5 (solicitors)
Total with qualifications	**18**	**78**
Total with no qualifications	**82**	**22**
Total	**100**	**100**

Notes: (i) The qualifications included in the non-ESI study comprised:
Accounting: CA, ACA, ACWA, FSSA, ASAA, FACCA, AACCA.
Secretarial: FCIS, ACIS, FISA, AISA.
Engineering: Member or Associate of Civil, Mechanical, Electrical, Production and Chemical Engineering Institutes. AFRAeS, FRAeS. Fellow or Member of the Institute of Petroleum. Fellow or Associate of Royal Institute of Chemistry.
Miscellaneous: Barristers, solicitors, patent agents, architects and chartered surveyors.
(ii) The non-ESI study discounted professional qualifications that occurred less than five times. This principle was applied to the ESI top managers; the qualifications held by ESI top managers that were excluded comprised: CompIEE; M.AmerIEE; MInstF.
Source: Column (1) Acton Society Trust, *Management Succession* (1956), p. 12.
Column (2) As Table 3.

(v) Careers

Before nationalisation, the ESI top managers were employed by electric lighting or power companies, or within government offices. For some top executives their university education or employment was interrupted by service during the First World War; some of them had served in both World Wars.

Length of time in post/length of service with company

It can be seen from Table 5 that immediately before nationalisation, top managers had long service with their former employer during their career progression. Over two-thirds (68%) had been employed by the same company for ten years or more. A third

(32%) had worked in their last post for less than five years. Though some had been in their last post for 5-9 (23%) or 10-14 (27%) years.

Table 5

Electricity Industry Top Managers
Length of time in last post and with last company before 1948

Years	In last post		With last company	
	No.	%	No.	%
1-4	29	32	14	16
5-9	21	23	15	17
10-14	24	27	27	30)
15-19	9	10	15	17) 68%
20-24	6	7	9	10)
25-29	1	1	10	11)
Total	**90**	**100%**	**90**	**100%**

Note: Columns may not sum to 100% due to rounding

To achieve the top management positions in a newly nationalised industry suggests that the first leaders were distinct in some ways from other managers. Their promotion to top posts may have arisen because they came from privileged backgrounds. To attempt to identify what may have distinguished them from other senior personnel in the industry their biographical details were studied.[30] It was found that around one in ten of the top managers had been brought in from outside the electricity industry to manage the industry through the programme of nationalisation: Citrine, Self, Bussey (BEA), Steward, Wood, (SWEB); Oliver (Manweb); Hallsworth (NORWEB); and Duke (SE Scotland). The majority of the board members had been promoted from either electricity or municipal undertakings.

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[30] Research undertaken by the author as part of this thesis, see footnote no. 17 above.

Privilege

Bearing in mind the costs of technical courses and attendance at university, it is necessary to consider whether the university men come from privileged backgrounds. Over a third (36%) had been to university, or undertaken technical education at school, college or polytechnic (39%). Included in both these proportions were those (11%) who had attended both technical college and university. The engineers attended university then trained with various companies before starting their careers with their training company or some other organisation but there was little opportunity for a technician to enter the higher executive positions let alone management.[31] The polytechnics and colleges of education provided an alternative to universities. In Great Britain there were two main routes to professional status in engineering; the industry-based route with a five-year apprenticeship and HNC; and the college-based route that involved a university degree and two-year graduate apprenticeship.[32] Obviously, the people who attended a university had more opportunities for study than the people who did evening study or part-time training. Many of the leading engineers of the day had grown from part-time study.[33] However, part-time evening courses were regarded with some scepticism by the IEE because it was felt that the three year period that was necessary to study for the ONC, and two years needed to study for the HNC, was exhausting and stultified rather than encouraged the processes of analysis.[34]

[31] IEE, 'A Critical Review of Education and Training for Engineers' (1942), *Journal*, IEE, Vol. 89, Part I pp.376–435, p.381.
[32] W. J. Gibbs, D. Edmundson, R. G. A. Dimmick and G. S. C. Lucas, 'Post-Graduate Activities in Electrical Engineering' (Sept. 1952), *Proceedings*, IEE, Vol. 99, Part I (General), No. 119, p.161.
[33] IEE (1939), *Journal*, IEE, Vol. 84, No. 506, p.176
[34] IEE, 'A Critical Review' (1942), *Journal*, IEE, Vol. 89, Part I, p.382.

'Elderly, hardworking, experienced and safe' were the characteristics appropriately used to describe the leaders of the unified ESI. It would also appear that some were more privileged (university education), perhaps narrow in outlook ('excellent' engineers), They were the leaders of an expanding newly nationalised industry. Therefore, plans they made for training, promotion and succession, had implications for management succession and the future of the electricity industry. The policies and procedures implemented under their leadership in a growing industry would be inherited by their successors. Their influence on planning for management development and selection should be apparent from the successive leaders of the ESI, whose characteristics are considered in the next section.

(b)   1961-1991, leadership over three decades

The previous section examined some of the characteristics of the first leaders of the electricity industry who were in office when it commenced operations as a nationalised industry in 1948. The structure of the ESI changed with reorganisation in 1957 and no major structural change occurred again until the industry was privatised some 30 years later. This section examines the career details and backgrounds of the top managers who followed the first leaders, with the objective of identifying among this group distinguishing characteristics that may have contributed to their promotion to top positions. One of their many responsibilities included the handling of management succession in their own boards and the implications of their decisions on the careers of those that they selected for higher positions. In order to provide comparisons, and trend data, for all ESI top managers, information about the first leaders is also included in the following investigation. The section begins by

examining (i) appointments to top management, and then analyses (ii) personal attributes, (iii) higher educational qualifications and early training, (iv) membership of professional bodies and (v) career progression.

(i)   Appointments to ESI top management

The constitution of the electricity industry was set out in the Electricity Act 1947, which gave the government statutory authority to appoint senior people within the electricity industry.[35] The 1947 Act established the British Electricity Authority, which was the national body for the Electricity Supply Industry. At regional level there were 14 Area Electricity Boards responsible for the distribution of electricity and 14 Divisions, that were responsible for generation, matched these. Controllers who reported to the BEA or CEA managed the Divisions. The Area Electricity Boards were autonomous regions each with its own chairman, board members and senior executives.[36] In addition to these organisations there were three Scottish Boards, including the North of Scotland Hydro-Electric Board (NSHEB), which had been in existence since 1943.

The government retained its powers to make senior appointments when the industry was reorganised in 1957.[37] The 1957 Act abolished the CEA and created two new bodies in England and Wales,[38] the Electricity Council and the Central Electricity

[35] Electricity Act 1947, Part I, Section 3, (2)(a), (b), (c) and (3)(a), (b), p.6.

[36] For the composition of an Area Board see C. T. Melling, *Light in the East* (1987), Ch 4, pp.29-32. See also, S. Robinson, *SEEBOARD The First Twenty-Five Years* (1974), p.2 and p.106; and C. Collier, *Southern Electric* (1992), p.15.

[37] Electricity Act 1957, Section 2, (3), (4) and Section 3, (2), pp.2-3.

[38] In Scotland, the South of Scotland Electricity Board (SSEB) was also established from the SE Scotland and SW Scotland Electricity Boards.

Generating Board (CEGB). The Electricity Council was considered by the Minister

to be a 'boneless wonder' while the CEGB was perceived by Ministers and civil

servants alike to be the future dominant force of the industry.[39] The government did

not make appointments in isolation, the Minister consulted with the chairmen who put

forward names of people that they considered were suitable candidates for any vacant

positions but Ministers did not always accept the nominations.[40] Conversely, the

inadequate salaries did not always attract the best people for the posts, a problem that

existed throughout the nationalised industries.[41]

(ii) Personal attributes: honours, awards and age structure

Honours and awards

The first leaders of the electricity industry were the most distinguished, counting

among their top management Knights and Privy Counsellors. Table 6 analyses the

type of honours possessed by the industry's top management at each ten year interval,

and the increase (+) or decrease (-) in the number of honours that had been awarded

since the previous period. It can be seen from the Table that the highest proportion of

honours (34%) was held by top managers who were in office in 1961. The CBE

(28%) and OBE (17%) tended to be the honours most frequently awarded to the

industry's top management but by 1991 the holders of these honours had declined to

just two individuals. Justices of the Peace, who formed some 13 per cent of the total

awards, had also disappeared by 1991.

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[39] Hannah, *Engineers, Managers and Politicians* (1982), pp.183-6.
[40] Ibid., pp.183-189.
[41] Gourvish, *British Railways* (1986), pp.32-33. See also Hannah, *Engineers, Managers and Politicians* (1982), p.185.

Table 6

Honours and Awards 1950 - 1991

Honours	1950	1961		1971		1981		1991		Total	
	No.	No.	±	No.	±	No.	±	No.	±	No.	%
KBE	3	3	0	0	-3	0	0	0	0	6	5
PC	2	2	0	1	-1	0	-1	0	0	5	5
KCB	1	0	-1	0	0	0	0	0	0	1	1
KCMG	1	0	-1	0	0	0	0	0	0	1	1
DL	1	1	0	1	0	0	-1	0	0	3	3
CBE	7	9	+2	8	-1	6	-2	1	-5	31	28
MBE	2	2	0	2	0	0	-2	0	0	6	5
OBE	5	6	+1	6	0	0	-6	1	+1	18	17
Military Cross	3	2	-1	1	-1	0	-1	0	0	5	5
JPs	4	6	+2	3	-3	1	-2	0	-1	14	13
FRS	0	1	+1	2	+1	0	-2	0	0	3	3
FRSE	1	2	+1	1	-1	1	0	1	0	6	5
FRSA	2	2	0	0	-2	1	+1	0	-1	5	5
TD	0	1	+1	3	+2	1	-2	0	-1	5	5
Total/± change	32	37	+5	28	-9	10	-18	3	-7	109	-32
% of total	29%	34%		26%		9%		3%		100%	

Age structure

Table 7 analyses the ages of the electricity industry's top managers at five-year intervals from 1950 to 1991. On average, over three-quarters (77%) were aged 50 or more and the remainder (23%) were under 50. Top managers, who were appointed at a relatively young age, tended to stay in post, thus preventing more frequent management succession.

The youngest top managers were among the first leaders. In 1950, over a third (37%) of top managers were under 50, and one-fifth (20%) were below 45 years old. The ESI did not produce as many young top managers again. Although after privatisation, in 1991, a third (35%) of the top managers were under 50 (30% were aged 45-49; and 5% were under 45).

Table 7

Age structure of Top Management from 1950 to 1991 inclusive (at 31 March)

Date	35-39	40-44	45-49	50-54	55-59	60-64	65+	Total	Age not known	Total Top Mgrs
31/3/19..	%	%	%	%	%	%	%	No.	No.	No.
1950	3	17	17	24	20	13	7	96	17	113
1956	0	9	19	18	25	19	10	89	13	102
1961	0	1	17	30	19	21	11	98	9	107
1966	1	4	6	28	34	19	7	99	7	106
1971	0	4	13	9	37	33	4	106	12	118
1976	0	5	13	25	20	37	1	101	16	117
1981	0	6	11	27	40	16	1	101	21	122
1986	2	14	10	19	31	25	0	102	23	125
1991	0	5	30	25	21	19	1	102	4	106
Total No.	6	63	135	202	246	201	41	894	122	1016
%	1%	7%	15%	23%	28%	22%	5%	88%	12%	100%

(iii)   Higher Education, Qualifications and Early Training

This section examines the type of higher educational institution frequented by top managers, their educational achievements and their training arrangements.

Educational institutions and apprenticeships

It can be seen from Table 8 that, over the period 1950-1981, on average, around three in ten ESI top managers attended either a university (37%) or a technical institution (32%), or had been articled or apprenticed (29%).

Table 8

Type of Further Education of Top Managers - 1950 - 1981

Attended by Top Managers	1950 No.	1950 %	1961 No.	1961 %	1971 No.	1971 %	1981 No.	1981 %
University	41	36	41	38	48	41	41	34
Tech. Sch./Tech. Coll./Poly.	44	39	36	34	33	28	34	28
Attended both Univ. & Tech	(13)	(11)	(5)	(5)	(4)	(3)	(8)	(7)
Sub-total	72	64	72	67	77	65	67	55
Articled or apprenticed	31	27	29	27	33	28	42	34
Degree but no details of educational institution	1	1	2	2	1	1	9	7
No details	9	8	4	4	7	6	4	3
Total	113	100%	107	100%	118	100%	122	100%

Table 9 analyses, at ten-year intervals, from 1950-1981, the type of higher education undertaken by each group of ESI top managers. It can be seen that, on average, chairmen (49%), deputy chairmen (51%) and secretaries (46%) were more likely to have experienced a university education while chief engineers (51%) and chief commercial officers (49%) were more likely to have attended college or polytechnic. Chief accountants (66%) were more likely to have been articled.

Table 9

Type of Higher Education 1950-1981

Type of Higher Education	1950	1961	1971	1981
Chairman	%	%	%	%
University	44	50	44	56
College	50	25	25	38
Apprenticed/Articled	19	19	25	6
Deputy Chairman				
University	65	56	56	25
College	41	38	38	38
Apprenticed/Articled	18	13	13	38
Chief Engineer				
University	33	25	38	50
College	53	63	50	38
Apprenticed/Articled	20	31	19	25
Chief Commercial Officer				
University	21	25	38	31
College	50	44	38	63
Apprenticed/Articled	21	13	6	19
Chief Accountant				
University	19	6	25	6
College	19	19	6	6
Apprenticed/Articled	56	56	69	81
Secretary				
University	33	56	56	38
College	20	13	19	6
Apprenticed/Articled	47	38	25	38

Note: Proportions are based on the number of top managers in each group. For example, seven out of sixteen chairmen attended university in 1950.

First degrees

The number of senior executives with first degrees increased incrementally during the 40-year period. It can be seen from Table 10 that more top managers held a degree in 1991 (60%), than in 1950 (37%). Chairmen, deputy chairmen and chief engineers

were most likely to possess first degrees while chief accountants were the least likely to have a degree. However, in 1991, following privatisation, eight (13%) of those with a degree were finance directors.

Table 10

First Degrees obtained by Top Managers 1950-1991

	1950		1961		1971		1981		1991	
	No.	%	No.	%	No.	%	No.	%	No.	%
Chairman	8	19	9	16	8	14	10	16	10	16
Deputy Chairman	8	19	8	15	10	17	9	14	10	16
Chief Engineer	6	14	12	22	10	17	11	17	9	14
Chief Comm. Off.	5	12	6	11	7	12	4	6	7	11
Chief Accountant	2	5	3	5	3	5	3	5	8	13
Secretary	5	12	7	13	8	14	12	19	3	5
Personnel Director	0	0	1	2	1	2	2	3	3	5
EC Adviser	N/A	-	2	4	1	2	3	5	N/A	-
Other Job	8	19	7	13	10	17	9	14	14	22
Total with degree	**42**	**37%**	**55**	**51%**	**58**	**49%**	**63**	**52%**	**64**	**60%**
All Top Managers	113		107		118		122		106	

Higher degrees

In 1950, one in seven (14%) ESI top managers possessed higher degrees. It can be seen from Table 11 that there was little variation in this proportion until 1991, after privatisation, when three in ten (29%) possessed higher degrees. The most commonly held higher degree among top managers was the MA.

Table 11

Higher Degrees held by Top Managers 1950 - 1991

	1950		1961		1971		1981		1991	
	No.	%	No.	%	No.	%	No.	%	No.	%
MA	9	56	7	37	10	67	9	53	8	25
MSc	2	13	3	16	2	13	3	18	9	28
MEng	2	13	6	32	2	13	0	0	0	0
PhD	1	6	0	0	1	7	3	18	9	28
DSc	1	6	2	11	0	0	0	0	1	3
LLD	1	6	1	5	0	0	2	12	1	3
MBA	0	0	0	0	0	0	0	0	4	13
Higher degrees	**16**	**14%**	**19**	**18%**	**15**	**12%**	**17**	**13%**	**32**	**29%**
Total top mgrs.	113		107		118		122		106	

Notes: 1971 and 1981: One top manager had achieved both an MSc and a PhD.
1991: One top manager had achieved both an MA and an MSc.

Table 12 shows the number of chairmen and deputy chairmen with higher degrees. In

1950, higher degrees were held by three in ten (30%) chairmen and deputy chairmen,

a proportion not surpassed in subsequent periods.

Table 12

Higher degrees held by chairmen and deputy chairmen

	1950 No.	1961 No.	1971 No.	1981 No.	1991 No.
(1) Higher degrees held by chairmen & deputies	9	9	4	5	7
(2) All ESI Chairmen & Deputy Chairmen	30	32	32	32	34
Row (1) as a per cent of row (2)	30%	28%	13%	16%	21%

Early training

The proportion of senior executives who had been trained rose from three in ten (37

of the 113 top managers) in 1950 to around four in ten in each succeeding ten-year

period. Before 1981 around six in ten top managers were trained by manufacturers

including: Metropolitan Vickers, British Thompson Houston, GEC, Reyrolle and

English Electric. The proportion that were trained in electricity companies rose from

one in five (22%) of those trained in 1950, shown in Table 13, to a half (50%) in

1981.

Table 13

**Companies that trained the ESI Top Managers
1950 - 1981**

Training Companies/Organisations	1950 No.	1961 No.	1971 No.	1981 No.
Private Companies/manufacturers	21	25	26	16
Electricity Company/Dept/Corporation	8	7	14	24
Other Nationalised Industry	1	2	2	2
Forces	0	1	0	1
Govt (Science & Ind; Aircraft & Prod)	2	0	0	2
Other training organisations	2	2	0	0
No details	3	6	5	3
Total training organisations – (No.)	37	43	45	48
(%)	33	40	38	39
All Top Managers	113	107	118	122

Note: The total for 1971 sums to more than the number trained, because of training undertaken
in more than one organisation.

(iv)   Professional qualifications

The electricity industry's top managers were members of a number of professional bodies that usually reflected their functional posts. Typically, membership across functions was highest among technical professional bodies than the non-technical accounting, secretarial and personnel functions. It can be seen from Table 14 that at least half of the top managers were members of the Institution of Electrical Engineers. Membership was strongest during the first twelve years of nationalisation, in 1950 (55%) and 1961 (59%).

Table 14

Membership of the IEE by Function of Top Manager

Engineering	1950 No.	1950 %	1961 No.	1961 %	1971 No.	1971 %	1981 No.	1981 %	1991 No.	1991 %
Chairman	11	69	14	88	14	88	9	56	13	76
Deputy Chairman	16	94	14	88	10	63	12	75	13	76
Chief Engineer	15	100	15	94	16	100	17	100	7	47
Chief Comm. Offr.	11	79	9	56	11	69	14	88	5	28
Other Chief Officers	3	6	4	8	1	2	1	2	1	2
Other Job	6	11	7	14	12	18	6	9	15	22
IEE total members	62	55	63	59	64	54	59	48	54	51
Total top managers	113		107		118		122		106	

Note: Percentages based on the number of top managers in each functional group.

Membership of the Institution of Electrical Engineers was relatively important because the IEE influenced the training curriculum of potential professional engineers, a large proportion of whom were employed by the ESI and other large enterprises such as the scientific Civil Service and other nationalised industries.[42] If ESI chairmen were not qualified engineers they became, ex officio, Companions of the IEE. Membership among chairmen was around seven in ten (69%) in 1950 and 1991 (76%). For deputy chairmen the proportions were 94 per cent and 76 per cent respectively. Membership

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[42] B. T. Turner, Management Training for Engineers (1969), p.9.

among chief engineers was around 100 per cent for each period from 1950-1981, but in 1991, following privatisation, less than half (47%) were members of the IEE. Chief commercial officers followed a similar decline from a membership of 79 per cent in 1950 to just 28 per cent in 1991.

There were few chartered engineers[43] in 1950 (3%) or 1961 (7%) but the numbers increased in the 1970s (36%), 1980s (45%) and in 1991 over half (53%) of ESI top managers were chartered engineers. It can be seen from Table 15 that, in 1971 and 1981, more chief engineers and chief commercial officers than the other functional groups of top managers held chartered engineering status. However, in 1991, the chartered engineers were predominantly chairmen (82% of all chairmen) or deputy chairmen (65%) followed by chief engineers (56%); and chief commercial officers (33%).

Table 15

Top Management Position of Chartered Engineers

Top Management position of Chartered Engineers	1950 No.	1961 No.	1971 No.	1981 No.	1991 No.
Chairman	2	2	6	9	14
Deputy Chairman	0	2	8	10	11
Chief Engineer	0	1	12	16	9
Chief Commercial Officer	1	2	8	13	6
Chief Accountant	0	0	0	0	1
Secretary	0	0	0	1	0
Personnel Director	0	0	0	0	1
Other Job	0	0	8	6	14
Total Chartered Engineers	3	7	42	55	56
Per cent of Top Managers	3%	7%	36%	45%	53%
Total No. of Top Managers	113	107	118	122	106

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[43] Chartered Engineers were the most senior of the three forms of professional engineer, according to EC, 'Education & Training - The Changing Scene. A Manager's Guide to Education and Training in the UK', Electricity Council (undated: 1980s), p.7, EC archive. Chartered Engineers were registered with the Engineering Council, on condition that their application fulfilled the appropriate standards of qualification, see J. C. Levy, *Standards and Routes to Registration (1985 Onwards). Consultative Document* (October 1983), Engineering Council – Professional Institutions Directorate, pp.1-7.

Among those top managers with accountancy qualifications, membership was spread across a number of professional accountancy bodies. It can be seen from Table 16 that in 1950 seven top managers held between them some twenty-four memberships of accountancy bodies[44] a ratio of three qualifications for each accountant, which was similar in each ten-year period. The Institute of Chartered Accountants boasted more top managers among its membership than of the other professional accountancy bodies.

Table 16

Top Management Position of Chartered Accountants

Top Management position of Chartered Accountants	1950 No.	1961 No.	1971 No.	1981 No.	1991 No.
Chairman	0	1	1	2	0
Deputy Chairman	0	2	3	1	0
Chief Accountant	6	10	8	5	8
Secretary	1	3	1	1	0
Total Chartered Accountants	7	16	13	9	8
Total Membership of Accountancy Bodies	24	35	35	34	26

Table 17 also shows that some chairmen, deputy chairmen and secretaries were qualified accountants. However, when compared with their peers in a detailed study[45] of the accounting profession, it can be seen (Table 17) that the ESI employed comparatively few qualified accountants among top managers.[46]

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[44] CCA (Chartered Association of Certified Accountants, 5), SAA (Society of Accountants and Auditors, 6), IMTA (Institute of Municipal Treasurers and Accountants, 6), Institute of Chartered Accountants, 7).

[45] D. Matthews, M. Anderson, J. R. Edwards, *The Priesthood of Industry. The Rise of the Professional Accountant in British Management* (1998), p.125.

[46] The 1998 'Priesthood' analysis studied around 300 companies, and included between 1,500 and 2,000 directors in the sample. The ESI figures represent a comparatively tiny proportion of the qualified accountants in each functional group, totalling around 15 in each function, in each period, but they are the ESI top management population figures.

Table 17

Qualified Accountants in ESI and External Organisations

	1951		1971		1991	
	ESI	Ext. Study	ESI	Ext. Study	ESI	Ext. Study
	%	%	%	%	%	%
% of chairman who were accountants	0	8	6	14	0	21
ESI deputy chairman / Study managing directors	0	5	19	14	0	19
% of accountant directors who were chartered accountants	40	75	50	77	44	80
% of company secretaries who were accountants	7	29	6	42	0	47

Notes: The ESI data in the column headed 1951 is for the year ending 31.3.1950. The original figures in the External Study column included decimal points, these have been rounded up or down to the nearest whole number. The ESI's deputy chairmen are compared with the External Study's managing directors.

Source: External Study columns: Matthews [et al], *Priesthood of Industry* (1998), p.125.

While the engineering and accountancy professions were represented by a number of professional bodies, the secretarial profession in the ESI was usually limited to one body, the Chartered Institute of Secretaries (CIS). Membership of the CIS among all top managers ranged from eight in 1950 to nine in 1971, declining to just three in 1991. Table 18 analyses the function of top managers who were members of the Institute of Chartered Institute of Secretaries.[47] It can be seen from the table that almost as many Chief Accountants as Secretaries had been members of the CIS, and that the number of chairmen and deputy chairmen who had been Chartered Secretaries could be counted on one hand.

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[47] Subsequently known as the Institute of Chartered Secretaries and Administrators.

Table 18

Top Management Position of Chartered Secretaries

Members of the CIS (Institute of Chartered Secretaries and Administrators, formerly Chartered Institute of Secretaries.)	1950	1961	1971	1981	1991	Total
	No.	No.	No.	No.	No.	No.
Chairman	1	0	0	2	0	3
Deputy Chairman	0	1	0	0	1	2
Chief Commercial Officer	0	0	1	0	0	1
Chief Accountant	3	2	1	3	0	9
Secretary	3	0	5	2	0	10
Other Job	1	2	2	0	2	7
Total Members of the CIS	**8**	**5**	**9**	**7**	**3**	**32**

(v) Career progression

By the time that top managers reached chief officer level, they were professionally qualified with substantial experience gained throughout their careers within the ESI. The nature of nationalisation, the nature of the electricity industry and a lifetime dedicated to its service meant that the top managers, in their middle age, were unlikely to move outside the industry. They achieved their chief officer status as a result of the post becoming vacant, either by retirement, death in service, or the promotion of the previous occupant. Occasionally it may have been necessary to achieve promotion by moving to another board. Over half (51%) of those who became chairmen and some four in ten (42%) of those who reached no further than deputy chairmen, had engineering backgrounds.

Table 19 shows the mobility of the chief officers who became chairmen. The chief commercial officers who became chairmen were more mobile than their chief officer colleagues, though there were fewer of them. Over half (55%) had moved three times at chief officer level and three (27%) moved twice. Similarly, there were

comparatively few board secretaries who became chairmen but they too were more mobile than the chief engineers. Five (63%) of the eight secretaries who became chairmen moved either three times (25%) or twice (38%). Of the forty-four engineers who became chairmen, some (41%) progressed in the same board to the top post, a half (50%) moved twice and a few (9%) moved three times.

Table 19

The career progression of chief officers to the top post of Chairman in one or more boards

Function	Same board No.	Same board %	Two boards No.	Two boards %	Three boards No.	Three boards %	Total Chief Officers No.	Total Boards No.
Engineering	18	41	22	50	4	9	44	74
Commercial	2	18	3	27	6	55	11	26
Accountancy	1	33	2	67	0	0	3	5
Secretary	3	38	3	38	2	25	8	20
Other	16	76	4	19	1	5	21	27
Total	**40**	**46**	**34**	**39**	**13**	**15**	**87**	**152**

Some chairmen remained in post for comparatively long periods, which had the effect of blocking the career progression of those below them. Chairmen who had secured extended tenure in their top posts, moved, or were moved, to other boards, which facilitated promotion from below. Table 20 gives examples of two individuals who chaired successively two or three boards during their careers.

Table 20

Mobility of Board Chairmen

Board Chairman of	From	To	Boards served on as chairman
SEEB, SSEB, EC	1950	1971	3
SEEB, NEEB	1976	1986	2

For those whose most senior position peaked at deputy chairman level, again, chief commercial officers were the most mobile. Four of the six chief commercial officers progressed within other boards. Over three-quarters (77%) of engineers remained

within the same board to progress to deputy chairman level, as did almost two-thirds

(63%) of chief accountants and all nine secretaries (100%).

Table 21

The career progression of chief officers to the top post of Deputy Chairmen
in one or more boards

Function	Same board No.	%	Two boards No.	%	Three boards No.	%	Total Chief Officers No.	Total Boards No.
Engineering	24	77	6	19	1	3	31	40
Commercial	2	33	4	67	0	0	6	10
Accountancy	5	63	3	38	0	0	8	11
Secretary	9	100	0	0	0	0	9	9
Other	3	100	0	0	0	0	3	3
Total	43	75	13	23	1	2	57	73

Sometimes chief officers leapfrogged over the deputy chairman post to become

chairman. The following eight examples show that a half of those promoted directly

to the office of chairman were chief engineers, and most were near retirement age.

Two full-time members from the CEGB became chairmen of two Area Electricity

Boards but there was very little movement of top managers from Area Electricity

Boards to the generating board.[48]

Table 22

Promotions of Chief Officers to Chairmen

Promoted to chairman from	5 year period	Approx. age	Chief Officer Board	Chairman Board
Chief Engineer	1956	62	NEEB	NEEB
Chief Engineer	1966	63	MEB	MEB
Member and CCO	1971	56	SWALEB	SWALEB
Full-time member	1976	62	CEGB	YEB
Director of Engineering	1976	52	SSEB	SSEB
Member	1981	60	CEGB	SEEB
Secretary	1981	61	EC	SEB
Chief Engineer	1981	57	SWALEB	YEB

[48] An exception is G. England who moved from the post of chairman of SWEB to become the chairman of the CEGB, following an earlier career in the CEGB.

Summary

The Minister in consultation with Electricity Board chairmen made appointments to senior positions in the electricity industry. However, the salaries of top posts did not always attract the best people. The Minister's perception of the weakness of the Electricity Council and the potential strength of the CEGB were likely to have had widespread influence, not only throughout the ESI but further afield rippling across and down from the top men.

The industry's first leaders were the most honoured with civil awards and, as these award holders retired, the awards diminished. The awards to the first leaders may have been as a result of the government's need to ensure that industry and business had confidence in the nationalised industries' leaders by awarding them prestige and status through high honours. It may also have been an attempt by the government to 'tempt able men into necessary, but financially less rewarding, occupations'.[49]

The youngest top managers in the electricity industry were among those who were first appointed. The ESI did not appoint as many young managers again until privatisation. The first leaders held fewer first degrees than their successors. Membership of the IEE was highest among the first leaders although Chartered Engineers became successively more prevalent in the industry. The ESI was a capital intensive industry but there were few chartered accountants compared with external organisations. Like the first leaders, top managers were likely to remain in post for

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[49] J. McMillan, *The Honours Game* (1969), p.201.

long periods, which meant that to achieve the highest positions, potential postholders had to be more mobile, though this did not apply to all functions such as engineering. By the time people succeeded the first leaders, they were educationally and professionally qualified with extensive experience and a track record behind them that led to the approval of their appointments. Although they were likely to have been as 'elderly, hardworking, experienced and safe' as the first leaders, they lacked the endorsement of government sanctioned high honours. They possibly had to wait longer for posts to become vacant and were thus older with fewer higher educational qualifications than their predecessors.

The leaders of the nationalised electricity industry made decisions about the management of their organisations at regular board meetings that were also attended by non-executive, or part-time, directors. The next chapter examines the role and backgrounds of the ESI's non-executive directors.

Chapter 8. The Role of Part-Time Board Members in the Electricity Industry: Non-Executive Women.

*If boardrooms are where power and influence reside, then women
are clearly excluded.* [1]

The previous chapter examined the ESI leadership portfolio. This chapter examines

the role of non-executive board members in the electricity industry. It will be recalled,

from Chapter 7, that males occupied all of the top management positions in the

electricity industry. This chapter will show that almost all of the electricity

organisations appointed females to sit as part-time board members. The chapter is

divided into three parts and begins by distinguishing between (a) private sector

company boards and nationalised industry boards; and then considers (b) the role and

qualifications of part-time members. Finally, the appointment of ESI female part-time

board members and their characteristics is examined in section (c) women on the

boards.

(a)   Private sector company boards and nationalised industry boards

*Altogether, the environment of the nationalised industries is very different from that
of private business, it requires special, quasi-political skills, and it has restrictions
as well as some blessings.* [2]

In the private sector the Board of Directors manage publicly owned companies on

behalf of the owners, their shareholders. The shareholders may be diverse, ranging

from institutional investors with large holdings, to an individual with a few hundred

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[1] Lady Howe (Chairman), *The Report of the Hansard Society Commission on Women at the Top* (January 1990), The Hansard Society for Parliamentary Government, p.61.

[2] G. Turner, *Business in Britain* (1969), p.169.

shares. At the annual general meeting the shareholders have the opportunity to

question the company's policies, methods and other matters through the Board of

Directors. The Board of Directors comprises executive and non-executive directors;

who are nominated by the Board and their appointments are confirmed at the Annual

General Meeting. Provided that the company operates within the scope of its

Memorandum and Articles of Association and complies with legislation, there is no

direct contact with Government. However, during the 1980s there was growing

concern about the way in which companies were run[3] and about the standards of

financial reporting and accountability.[4] In 1992, the Cadbury Committee[5] reported on

corporate governance:

> *Corporate governance is the system by which companies are directed and*
> *controlled. Boards of directors are responsible for the governance of their*
> *companies. The shareholders' role in governance is to appoint the directors and the*
> *auditors and to satisfy themselves than an appropriate governance structure is in*
> *place. The responsibilities of the board include setting the company's strategic*
> *aims, providing the leadership to put them into effect, supervising the management*
> *of the business and reporting to shareholders on their stewardship. The board's*
> *actions are subject to laws, regulations and the shareholders in general meeting.* [6]

In particular, the Cadbury Report highlighted the importance of the role of

independent non-executive directors[7] in assessing board performance and in taking a

lead in issues of conflict of interest.[8] Cadbury made a number of recommendations

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[3] J. Charkham, *Corporate governance and the market for control of companies* (1989), Bank of England Panel Paper no. 25.

[4] A. Cadbury (Chairman), *The Committee on the Financial Aspects of Corporate Governance and Gee and Co. Ltd* (December 1992), p.14.

[5] Ibid.

[6] Ibid., p.15.

[7] Sir Adrian Cadbury was formerly the chairman of PRO NED (Promotion of Non-Executive Directors), an organisation established in 1982 'to promote recognition of the major contribution which independent non-executive directors can make to company boards, and to help companies wishing to appoint such directors to find appropriate candidates'. Extracted from PRO NED, *A Practical Guide for Non-Executive Directors* (September 1987).

[8] Ibid., pp.20-24.

that concerned their calibre, their numbers on the board, their independence, the provision of information, their appointments and the numbers available.[9] In 1985, some seven years before Cadbury reported, guidelines for non-executive members had been distributed throughout the electricity industry by the Department of Energy.[10] The guidelines had been drawn up as a result of the Monopolies Commission Reports on YEB and SWALEB.[11]

The appointment of board members was set out in statutes, which omitted to specify key criteria for appointments, a concern that was highlighted by NEDO in 1976:

> *The statutes do not distinguish between executive and non-executive functions, give little indication of the qualifications required for board members and give no guidance on methods of appointment and related terms and conditions.*[12]

Before the 1980s there was no methodical or systematic way in which people were selected to serve in a non-executive capacity on the boards. Before 1973 various lists of names, including one for nationalised industries, were compiled in secrecy.[13] The Public Appointments Unit (PAU), which was established in 1975,[14] compiled a list of names but this approach appeared to be 'unsuitable' [15] because there were so few

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[9] Ibid., pp.23-24.

[10] Letter from Department of Energy (A. Goodlad) to EC Chairman (T. P. Jones), enclosing guidelines prepared by the Department for non-executive members. It was pointed out in the letter that reference throughout the guidelines referred to "non-executive" rather than "part-time" members because the term "non-executive" 'expresses the status of such members more accurately. The Department intends to adopt this expression for all purposes in the future' (23 April, 1985), EC archive

[11] Letter from Alan Brown, Head, Electricity Division, Department of Energy, to T. P. Jones, Chairman, Electricity Council (undated - received by EC September 1984), EC archive.

[12] NEDO, *A Study of UK Nationalised Industries*, HMSO (1976), p.34.

[13] P. Hennessy, *Whitehall* (1989), p.553.

[14] T. Morse, *Which Direction? Board Appointments in Nationalised Industries* (1984), Centre for Policy Studies, p.4. The PAU was a part of the Civil Service Department (CSD).

[15] Ibid., pp.3-4.

names on the list and those names that were included had been selected in a casual

rather than scientific way. The terms of reference of the PAU were:

> *In conjunction with Departments generally and in consultation with representative*
> *bodies to improve the recruitment of able people from all sections of the community*
> *for public service.* [16]

Most of the work determined by the PAU related to part-time posts that were unpaid

and required comparatively little time from those designated to the boards, often a

half day attendance for monthly board meetings. Deletions were only made from time

to time when a person 'reached a certain age'.[17] The sponsor Ministers chose the

people to be appointed from the advice they received from the PAU concerning the

candidates available for appointment. For years before the establishment of the PAU,

the list of names was commonly referred to as the 'Great and the Good'.[18] A change

in the management of the PAU list, to Jonathan Charkham, resulted in a different

approach to compiling the list of names, so that 'it is now a working tool'.[19] By 1984

there were around 20,000 names (compared with some 3,500 names in 1979) of

people available for appointment to public boards. There were two lists, one 'active'

list, known as the Central List, containing the particulars of about five thousand

potential candidates. The second list contained the names of less appropriate

candidates who had either retired or whose names had been withheld from the central

list because they were considered to be unsuitable. Names were accumulated from a

wide range of sources:

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[16] Ibid., p.4.

[17] S.C.N.I., *The Relationships between Ministers, Parliament and the Nationalised Industries,* Session 1978-1979, HC 169, iv (14.2.1979), p.71.

[18] Hennessy, *Whitehall,* (1989), Chapter 13, pp.540-586.

[19] Ibid., p.555.

Many were suggested by Government Departments (one former senior civil servant remarked tartly that Departments supply more names to the Unit than they receive). Others were recommended by people from all walks of life, and by professional associations or other bodies. Individuals could also nominate themselves for inclusion - they were asked to fill in a form and submit the names of two referees.[20]

The PAU was usually consulted about external candidates to sit on boards in an executive or non-executive/part-time capacity. It was not involved in internal appointments in an industry.[21] The gas industry used the PAU list of names to identify part-time board members with business experience outside the industry.

The 1947 Electricity Act specified that an electricity board should comprise a chairman and between five and seven other members appointed by the appropriate Minister. The chairman and deputy chairman were appointed for renewable five-year tenures. The part-time members held three-year renewable terms. The appointment of the full-time chairman and deputy chairman, who were board members, by an outside authority, such as the appropriate industry's Minister, and not by the Board itself, was considered to be 'unusual' and a 'limitation on its powers' by the MMC.[22] Some board executives were reappointed; others were retired at the appropriate time, but those who resisted the government line were not reappointed.[23] On one occasion a senior appointment was offered to Frank Chapple, a key trade union[24] officer who

[20] Morse, *Which Direction?* (1984), p.4.
[21] S.C.N.I., *Relationships between Ministers* HC 169, iv (14.2.1979), pp.63-69.
[22] MMC, *Yorkshire Electricity Board. A report on the efficiency and costs of the Board* (September 1983), The Monopolies and Mergers Commission, HMSO, Cmnd. 9014, p.41.
[23] M. Ince, *Energy Policy. Britain's Electricity Industry* (1982), p.23. This reference was to Glyn England, chairman of the CEGB, who had shown 'insubordination over the Monopolies and Mergers Commission's report on the CEGB', pp.22-23.
[24] Mr Chapple became General Secretary of the Electrical Trades Union a few months after his election to Labour's NEC in 1966, in F. Chapple, *Sparks Fly: a trade union life* (1984), p.110.

negotiated with other union leaders and the electricity industry over the terms and

conditions of employment for manual/industrial workers. He commented:

> *Eight years on the industry is still not reorganised and the marathon Sizewell Inquiry is considering a PWR design programme - while apparently substantiating those original TUC anxieties about cost. My plain speaking and strictures on behalf of the TUC both embarrassed and irritated Benn. He was Machiavellian enough to try and get rid of me by the old device of kicking me upstairs: he offered me the Deputy Chairmanship of the Electricity Council.*[25]

The Electricity Council had, in fact, considered the appointment of a trade unionist for

membership of the Council as early as 1973.[26]

The relevant Minister consulted directly with the Area Board chairmen regarding the

appointment of part-time members.[27] Criteria existed for the type of experience that

potential board members should possess and their suitability for the positions was

rigorously examined. However, it was suggested that other criteria should be the

possession of independent means and mind so that those selected would not be

apprehensive about relinquishing their appointments.[28] Some thirty years later, the

question of the independence of non-executive board members was emphasised by

Cadbury.[29]

It was common for all of the electricity boards to appoint one or two chief officers as

board members during 1961-1971, and some were reappointed. Some 26 full-time

[25] Chapple, *Sparks Fly* (1984), p.154.
[26] Memorandum from H. C. Spear to Sir Peter Menzies, headed 'Member of Council with Union Background' (14 June 1973), EC archive.
[27] C. Melling, *Light in the East* (1987), pp.29-30.
[28] R. S. Edwards, and H. Townsend, *Business Enterprise: its Growth and Organisation* (1958), pp.523-4.
[29] Cadbury Report (1992), pp.23-24.

employees were appointed to the board as part-time members, formed from chief commercial officers or managers (9); chief engineers (7), chief accountants (5), secretaries and solicitors (4), and one was a director-general from the CEGB. Because the number of board members was limited by statute, the effect of appointing full-time officers as part-time members of the board resulted in the appointment of fewer external part-time board members. It will be recalled from Chapter 5 (a), above, that Lord Herbert[30] had recommended that district manager posts in electricity boards should be used as development posts. In some boards the equivalent post to the district manager was the area manager and within a few years of Lord Herbert's recommendation, initially in 1959, area managers were appointed as board members. They retained their posts as area managers while serving on the board and they usually, but not always, went on to become chairmen or deputy chairmen of those boards on which they were members. Table 1 analyses the progression of some electricity board area managers to top management posts following their period as board members.

Table 1

Progression of Area Managers to Board Members

Dates Board Member	Name	Profession/ expertise	Board	Subsequent post
1959/60/1	F Linley	CEng, MIEE	NORWEB	Deputy Chairman, NORWEB
1964/5/6/7	A W Bunch	FCA	SEB	Chairman, SEB; Chairman, Electricity Council
1976/7	G A Squair	CEng, MIEE	SEB	Chairman, SEB; SEEB
1969/70/1/2/3/4	D H Walker	CEng, FIEE	SEB	Deputy Chairman, SEB
1963/4/5//6/7	J S Yates	CEng, MIEE	YEB	Deputy Chairman, YEB
1962/3/4	J F Skipsey	BSc, MIEE	NEEB	No succession to top posts

Source: Dates, Names and Boards in attachment to a letter from J. D. M. Bell, Chairman, NORWEB, to G. Hadley, Under Secretary, Department of Energy (2 June 1983), EC archive. Profession/expertise and subsequent posts researched from various Reports and Accounts, Electrical Who's Who and Electricity Supply Handbooks.

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[30] Herbert Report (1956), pp.76-78.

The board chairman could rely on the support of his chief officers or area managers to be non-controversial during board meetings with regard to his strategy and tactics. This also meant that the boards were likely to be more introspective especially as the numbers of part-time members were limited by statute. This meant that the number of outside appointments was reduced to enable the appointment of employees to the board. The Cadbury Report emphasised the independence of non-executive directors and did not expect them to have the 'inside knowledge of the company of the executive directors'.[31] In making his recommendation that the majority of non-executive directors should be independent, he explained:

> *This means that apart from their directors' fees and shareholdings, they should be independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgement.* [32]

The next section examines the role of part-time members and shows that they were thought to be under-utilised.

(b)   The role and qualifications of part-time members

NEDO reported, in 1976, that the role of non-executive appointees in the nationalised industries was unclear and that they had not been given any form of guidance.[33] The Monopolies and Mergers Commission (MMC), which had been given the task of undertaking regular audits of the nationalised industries in the 1980s, added its voice to this criticism. In the electricity industry, the importance of the role of part-time members was emphasised by the MMC when it investigated the efficiency and costs of

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[31] Cadbury Report (1992), p.23.
[32] Ibid., p.22.
[33] NEDO, *Study of UK nationalised industries* (1976), HMSO, p.35.

several electricity boards. The part-time members were there to provide advice and criticism of the boards' activities but the part-time members were not being used to their fullest potential, and their roles were limited rather than extended. In addition, the salaries of the nationalised industries' non-executive board members had remained the same for some thirty years, from 1946 to 1976, which could have influenced their effectiveness:

> *Their remuneration .. reflects the comparatively limited contributions which they are in reality able or allowed to make in many corporations.* [34]

In some boards the strength of part-time board members was diminished when, in addition to the chairman and deputy chairman, the board had two full-time employees serving on the board. The Central Electricity Generating Board (CEGB) had no part-time board members before it was criticised, in 1976, by the Plowden Committee[35] for its introspective behaviour. The Committee perceived that part-time board members could have broadened the board's perspective and constructively criticised its proposed actions.[36] Yorkshire Electricity Board (YEB) was also criticised for not making more use of its part-time members. YEB's 'evolutionary' approach to reorganisation was seen as postponing and avoiding change by the MMC, who recommended that the part-time members should play a more active role in YEB's strategy.[37] When they were appointed, part-time members were not given any clear guidelines concerning their role on the Board. In South Wales Electricity Board (SWaEB) the MMC wanted the roles of part-time members to be strengthened by

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[34] Ibid., p.35.
[35] Lord Plowden (Chairman) *The Structure of the Electricity Supply Industry in England and Wales. Report of the Committee of Inquiry* (January 1976), Cmnd.6388.
[36] Ibid., p.41.
[37] MMC, *Yorkshire Electricity Board* (1983), Cmnd.9014, p.41.

providing them on appointment with a clear brief which would encourage them to adopt a continual questioning role of the Board's operations.[38] In 1984, the SWaEB part-time members expressed concern to the MMC that they would have to give more time to the Board's affairs than the one and a half to two days per month that was expected of them.[39] In 1985, reporting on the North of Scotland Hydro-Electric Board (NSHEB), the MMC stressed that the role of the part-time members should not be to judge the performance of the executive but to assist in the determination of strategy and the setting of targets.[40] In the South of Scotland Electricity Board (SSEB), however, the MMC found that the part-time board members played an active and effective role in management through the board and its committees.[41]

It can be seen from Table 2 that during the period 1951-1986 there was a change of emphasis in the type of ESI part-time board members. Many (27%) of those appointed had been honoured according to the order of chivalry. A quarter (24%) were members of various professional institutions and association. One-fifth (21%) had university degrees and one in six (16%) were Justices of the Peace. However, the type of part-time board members changed from those holding chivalrous titles, decorations, awards or qualifications before 1976, to those holding academic qualifications and membership of professional institutions in the more recent period 1976-1986.

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[38] MMC, *South Wales Electricity Board. A report on the efficiency and costs of the Board* (February 1984), Cmnd.9165, pp.26-27.
[39] Ibid., p.5.
[40] MMC, *North of Scotland Hydro-Electric Board. A Report on the efficiency and costs of the Board* (October 1985), Cmnd.9628, p.31.
[41] MMC, *South of Scotland Electricity Board. A Report on the efficiency and costs of the Board* (August 1986), Cmnd.9868, p.19.

Table 2

Part-Time Board Members - Their Titles, Qualifications and Professions
observed at five-year intervals: 1951-1986

Type of Qualification	1951 %	1956 %	1961 %	1966 %	1971 %	1976 %	1981 %	1986 %	1951-86 %
Honours	25	31	39	32	34	19	16	12	27
Professional Membership									
Engineering	19	9	5	9	8	13	10	13	11
Accountancy	1	3	4	3	2	3	4	8	3
Management	0	3	0	2	3	5	7	8	3
Secretarial	1	1	1	1	0	0	1	2	1
Science	0	1	1	0	0	0	1	4	1
Personnel Management	0	0	0	0	0	1	0	0	0
Other prof. membership	2	0	2	5	6	9	13	11	5
Total Prof. Membership	20	17	10	15	13	21	23	34	24
University Degrees	10	14	16	18	21	32	35	29	21
JP	27	22	20	16	16	12	9	5	16
Medals/Decorations	8	8	7	9	3	2	1	3	6
LL/DL (Lord/Dep. Lieut.)	5	7	5	5	4	2	2	3	4
Membership of Societies	1	1	1	2	3	2	1	2	1
Aide-de-Camp	0	1	1	0	0	0	0	0	*
Total qualifications (No.)	169	190	189	197	153	125	139	168	1330
Percent of total (%)	13	14	14	15	11	9	10	13	100

Source: The names and qualifications of part-time board members extracted from the boards' *Reports and Accounts*. Biographical details extracted from various copies of *Who's Who*, *Electrical Who's Who*, *Electricity Supply Handbooks* and government press releases.

The change in the type of board members appointed was a reflection of the period following the Second World War and the emphasis on 'safe' board members who were appointed to the newly nationalised industry boards. Whereas Justices of the Peace formed over a quarter (27%) of part-time board members in 1951, in 1986 the corresponding proportion was one in twenty (5%).

The next section examines the appointment of women as board members in either an executive or non-executive capacity.

(c)   Women on the boards

Some of the 3,500 names on the PAU Central List of the 'Great and the Good' consisted of women whose names had been selected for inclusion on the list by 'using every reasonable source open to us'.[42] In 1981 women formed some 16 per cent of the nominations.[43] Their names were obtained from such sources was the Equal Opportunities Commission, the Women's National Commission, Women in Management, and Women's Who's Who. The reason given for the lack of women on nationalised industry boards was because there were insufficient women in that sort of position.[44]

Before privatisation of the electricity industry, during the period 1951-1986, some 38 female non-executive board members were appointed. Some of them were subsequently reappointed. The CEGB was the only Board that did not have a female part-time board member during its existence. Table 3 analyses the credentials,[45] of part-time board members, observed at five-year intervals, from 1951-1986.

It can be seen from Table 3 that the proportion of female part-time board members who held professional qualifications (24%), or were JPs (17%), was similar to those for all board members.

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[42] S.C.N.I., *Relationships between Ministers* (14.2.1979), p.71.

[43] Hennessy, *Whitehall* (1989), p.555.

[44] S.C.N.I., *Relationships between Ministers* (14.2.1979), p.71.

[45] Credentials in this sense refer to the honours, professional membership, educational qualifications, medals and decorations and other achievements attained by the non-executive board members, found from research undertaken by the writer. Names and qualifications of part-time board members were obtained from the boards' various *Report and Accounts*. Biographical details were checked by using various copies of *Who's Who*, *Electrical Who's Who*, *Electricity Supply Handbooks* and government press releases.

Table 3

**Part-Time Board Members - Titles, Qualifications and Professions of
by Gender**

Type of Qualification	Female P/T board members		Male P/T Board members	
	No.	%	No.	%
Honours	15	17	342	28
Professional Membership				
Engineering	6	7	135	11
Accounting	2	2	42	3
Management	2	2	41	3
Secretarial	0	0	11	1
Science	5	6	7	1
Personnel Management	1	1	0	0
Other	5	6	67	5
Total Prof. Membership	21	24	303	24
JP	15	17	202	16
University Degrees	35	39	243	20
Medals/Decorations	0	0	75	6
LL/DL (Lord/Deputy Lieutenant)	2	2	58	5
ADC (Aide-de-Camp)	0	0	2	*
Membership of Societies	1	1	16	1
Total Qualifications etc	**89**	**100**	**1241**	**100**

Source: *Report and Accounts, Who's Who, Electrical Who's Who, Electricity Supply Handbooks* and government press releases.

Females were less likely to hold honours (17%) but proportionately more of them held university degrees (39%) than male part-time board members (28% and 20% respectively). Female board members did not have a military background; none of them had a secretarial qualification. On the other hand, some were members of professional engineering or scientific institutions. Out of all the part-time board members just one female was a member of the Institute of Personnel Management.

During the twenty-year period 1951-1971, just eight females (21% of all female part-time electricity board members) were appointed to non-executive board positions. In the ten-year period 1976-1986, the numbers had increased fourfold to thirty, representing some 79 per cent of all female part-time electricity board members. The increase in the number of appointments after 1975 is likely to have been as a result of

three combined pressures. The first may have been due to the Sex Discrimination Act

1975. The second reason could have been as a result of the suggestion by the

Department of Trade and Industry (Electricity Division) that:

> *though this may appear in conflict with what has gone before - Ministers are very keen to see ladies appointed to the Area Boards.*[46]

The third pressure may have been the establishment of the Public Appointments Unit

in 1975 and the establishment of the list of names.[47]

Table 4 analyses the appointment of female non-executives by each electricity board

during the period 1951-1991.

Table 4

**Appointment of female part-time Board Members
by Organisation 1951-1991**

Organisation	1951-1971	1976-91	Total 1951-1991	
	No.	No.	No.	%
YEB	1	4	5	12
SEEB	1	4	5	12
LEB	1	3	4	9
NEEB	1	3	4	9
EMEB	0	4	4	9
SWEB	1	2	3	7
NSHEB	1	2	3	7
EEB	0	3	3	7
NORWEB	1	1	2	5
SEB	0	2	2	5
SSEB	0	2	2	5
MEB	0	2	2	5
SWaEB	0	2	2	5
MANWEB	0	1	1	2
BEA/CEA	1	N/A	1	2
CEGB	0	0	0	0
Total	**8**	**35**	**43**	**100**

Notes: Percentage columns do not sum to 100 per cent due to rounding. N/A means not applicable. BEA/CEA abolished 1956; replaced by the Electricity Council and CEGB, both abolished with privatisation. Part-Time Members of the Electricity Council were board chairmen.

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[46] In a letter from the Department of Trade and Industry, M. R. Garner, to R. B. Brown, Chairman, Southern Electricity Board, on the subject of Board Appointments (22 February, 1973), EC archive.
[47] Morse, *Which Direction?* (1984), pp.3-4.

The Table also shows that some 43 females became non-executive board members but their appointments were not evenly distributed among electricity boards. For example, between them, Yorkshire Electricity and South Eastern Electricity appointed ten (23%) of the 43 female part-time board members. Between 1951 and 1971, only half (8) of the 16 boards had each appointed a female part-time board member. Between 1976 and 1991, five boards had appointed half (18) of the female non-executive members.

Part-time members were reappointed if boards were satisfied, or comfortable, with them. Although some 43 females were appointed during 1951-1991, an analysis of board membership, observed at five year intervals, during the forty-year period, results in a total of some 70 females on the boards. This apparent increase in female non-executive board members was the consequence of inviting some of the members to serve for a further three years. For example, it can be seen from Table 4, above, that London Electricity Board (LEB) appointed four females, one of whom was found to be serving in each of the five year periods: 1951, 1956, 1961 and 1966, resulting in the figure of eight female board members shown in Table 5 below. Similarly, SWEB reappointed a female part-time board member who was found to be serving in each of the five-year periods: 1956, 1961, 1966 and 1971.

Table 5

**Total number of female part-time Board Members
observed at five-year intervals: 1951-1991**

Board/Authority	Number of female board members at five year intervals 1951-91	
	No.	%
LEB	8	11
SWEB	8	11
YEB	7	10
SEEB	7	10
NEEB	6	9
NSHEB	5	7
EMEB	5	7
EEB	4	6
NORWEB	4	6
SEB	4	6
SSEB	3	4
MANWEB	3	4
MEB	2	3
SWaEB	2	3
BEA/CEA ①	2	3
CEGB ①	0	0
Total	**70**	**100**

Notes: Percentage columns do not sum to 100 per cent due to rounding.
① See note to Table 4.

It can be seen from Table 6 that, during the period 1951-1996, females formed one in

ten non-executive directors. The proportion of non-executive female board members

increased around the time of the Sex Discrimination Act 1975 but decreased with

privatisation. During the period 1951-1996, which includes the equivalent companies

created by privatisation, many of the women non-executive board members were re-

appointed. There were found to be some 75 female part-time board compared with

776 male part-time board members. Females formed less than ten per cent of the 851

part-time board members, measured at five-year intervals from 1951-1996.

Table 6

Part-Time Members of Electricity Boards 1951 - 1996

Date	Total P/T Members	Female Members	Females as a proportion of all P/T Members
	No.	No.	%
1951	100	4	4
1956	92	5	5
1961	89	3	3
1966	86	3	3
1971	87	2	2
1976	87	14	16
1981	90	20	22
1986	99	14	14
1991	69	5	7
1996	52	5	10
Total	**851**	**75**	**9**

Notes: Excludes full-time members such as chairmen, deputy chairmen, chief officers and other senior employees. 1956: BEA/CEA abolished, replaced by the Electricity Council and CEGB. 1961 includes Electricity Council and CEGB, both abolished in 1990 with privatisation. 1991 includes National Power, PowerGen and National Grid. 1996. SWEB, EEB, Manweb and NORWEB did not have part-time members because they had been taken over by other companies.

Source: Electricity Supply Handbooks and Reports and Accounts.

The ratio of female part-time board members improved to one female for every five part-time board members in 1981. However, by 1991, following the privatisation of the industry, the ratio worsened considerably to one female in fourteen part-time board members. By 1996 the industry had undergone further restructuring and some of the electricity companies had been taken over or merged with other companies, thus affecting board membership. The effect of privatisation on female part-time board members appears to have been a contributory factor to the decline in the number of female part-time board members in the last decade.

Table 7 provides a snapshot of the number of part-time members of some 19 nationalised industries boards in 1984, which omitted the 12 Area Electricity Boards in England and Wales but included the two Scottish Boards, the Electricity Council

and CEGB. It can be seen that of the 99 part-time board members just six (6%) of them were women, which is considerably less than the whole of the ESI in 1981 (22%) and 1986 (14%), shown in Table 6 above.

Table 7

Part-Time Members of Nationalised Industries - 1984

Industry	Part-Time Members	Female Members	Females as a proportion of all P/T Members
	No.	No.	%
British Airports Authority	5	1	20
British Airways	4	0	0
British Gas Corporation	7	0	0
British National Oil Corp.	7	0	0
British Railways Board	6	1	17
British Shipbuilders	5	0	0
British Steel Corporation	5	0	0
British Telecommunications	3	0	0
British Waterways Board	6	0	0
Civil Aviation Authority	2	0	0
CEGB	3	0	0
Electricity Council	2	0	0
National Bus Company	5	1	20
National Coal Board	5	0	0
NSHEB	7	1	14
Post Office	4	1	25
Scottish Transport Group	9	0	0
SSEB	7	1	14
UKAEA	7	0	0
Total	**99**	**6**	**6%**

Source: T. Morse, *Which Direction?* (1984), pp.22-40.

In relation to Table 7 it should be pointed out that making comparisons with other nationalised industries is difficult because of the difference in the structure of the industries. For more than four decades, the electricity industry comprised some fifteen boards in addition to the Electricity Council. This meant that each board had its own part-time members.

Removal of the data for electricity boards in Table 7 results in even fewer women part-time members (5%) sitting on nationalised industries' boards. However, perusal

of the annual reports for the British Railways Board, during 1981-1991, reveals an improvement, shown in Table 8. An improvement that was not apparent on the Board of the electricity industry's main competitor, British Gas.

Table 8

**Part-Time Members of British Gas and British Railways Board
at five-year intervals, 1981-1991**

| | British Gas | | | British Rail | | |
	Part-Time Members	Female Part-Time Members	Females as a proportion of all P/T Members	Part-Time Members	Female Part-Time Members	Females as a proportion of all P/T Members
	No.	No.	%	No.	No.	%
1981	9	0	0	10	1	10
1986	4	0	0	8	2	25
1991	5	1	20	7	2	29
Total	**18**	**1**	**5**	**25**	**5**	**20**

Source: *Reports and Accounts*, British Gas and British Railways (1981, 1986, 1991).

Although the inclusion of female board members who served on electricity boards appears to be low when compared with their male counterparts, more recent evidence shows that the electricity boards had a higher proportion of female board members than their equivalent in private industry. In 1989, a Hansard Society survey[48] found that out of 180 top CBI firms and ten major building societies, the proportion of female non-executive directors was 4 per cent. The findings from an Ashridge Management survey,[49] undertaken in the same year among the 200 largest UK companies, revealed similar findings. Just 18 (9%) of the companies appointed females who served in a non-executive capacity. Most of these non-executive directors were appointed to boards in the service sector (8), or the communications

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[48] Lady Howe (Chairman), *Women at the Top* (1990), Hansard Society, p.60.

[49] V. Holton, and J. Rabbetts, *Powder in the Board Room. Report of a Survey of Women on the Boards of Top UK Industrial Companies* (August 1989), Ashridge Management Research Group, (pages unnumbered).

and transport sector (5). Few were in the energy (2), manufacturing (2) or building and civil engineering sectors (1). These women were accomplished businesswomen who were in demand. The majority (14) of the female non-executive board members had also been appointed to serve as non-executive directors on the boards of other organisations. These women were also influential; one-third were titled, held political or other powerful connections that would have been useful to their respective boards. Their appointments to more than one directorship may have been the result of their influential connections and/or their proven ability on the board but undoubtedly they had the capacity to handle more than one directorship.

Whereas females were only appointed to electricity boards in a non-executive capacity, in private industry, a tiny proportion became executive board members. In 1989 the Hansard Society survey[50] found that the proportion of female executive directors in some 190 organisations was 0.5 per cent. This low level of female representation on the boards of private sector companies was supported by the findings from the Ashridge Management survey[51] undertaken around the same time. The Ashridge study found six (3%) female board members in 200 companies.[52] Table 9 reproduces the results of the Hansard Society study[53] of 190 organisations. The table shows the frequency of female representation on the boards (2%) in either an executive (0.5%) or non-executive (3.9%) role.

[50] Lady Howe, *Women at the Top* (1990), p.60.
[51] Holton and Rabbetts, *Women on UK Boards* (1989).
[52] Ibid., p.1.
[53] Lady Howe, *Women at the Top* (1990), p.60.

Table 9

Female Board Representation 1989

	Men		Women		Women as % of men
	No.	%	No.	%	%
Executive Directors	795	55	4	13	0.5
Non-Executive Directors	642	45	25	87	3.9
Total	1437	98%	30	2%	

Source: Lady Howe, *Women at the Top* (1990), p.60.

Summary

The method of appointments to the boards of nationalised industries was laid down in statutes. This distinguished them from private sector companies whose shareholders agreed board appointments at their annual general meetings. Secondly, the method of selection of individuals to serve in a non-executive capacity on the nationalised industry boards was casual rather than objective although this was improved with the establishment of the PAU in 1975. Appointments of part-time board members in the electricity industry were effected following consultation between the Minister and the appropriate board chairman. There were, however, weaknesses where the part-time member relied on the appointment. Another weakness concerned the appointment of employees to the boards, which resulted in fewer external members and meant that employee members would not demur from the chairman's chosen course of action. The role of part-time board members in the electricity industry was governed by the parameters in vaguely written statutes that set out their appointments. It was not within the remit of the boards to redefine their roles until the MMC challenged the limited roles of the non-executive part-time board members. Following nationalisation, the qualifications held by part-time board members tended to reflect status and stability, they held awards of chivalry, were JPs and/or were members of

professional institutions, whereas before privatisation the emphasis had changed to professional membership and academic qualifications.

Few females were appointed as part-time members to electricity industry boards but there was a four-fold increase in their appointments around the time of the 1975 Sex Discrimination Act. Although the numbers of appointments of females to part-time board membership were small, there were differences between boards in the frequency of their appointments and reappointments. The ratio of part-time appointments was one female to ten males but this worsened with privatisation to one female to every fourteen males. Compared with studies of other companies, however, the electricity industry appeared to have appointed a higher proportion of part-time female members. Conversely, it was shown that a minuscule 0.5 per cent of females were appointed as executive directors in private industry compared with none in the electricity industry.

None of the non-executive board appointments were made to female employees, they were made to women from outside the electricity industry.

With this last point in mind, the next chapter investigates the employment of females in the ESI during the period of nationalisation to understand why none of them rose to top management positions or were appointed as part-time board members.

Chapter 9. Female Employment, Recruitment and Development in the Electricity Industry

In Chapter 7 it was seen that all of the ESI top managers were male. In Chapter 8 it was shown that some women were appointed to the boards in a non-executive capacity but all of them were employed outside the electricity industry. This chapter examines the employment and development of females in the electricity industry in an attempt to understand why none of them rose to top positions in the electricity boards either as full or part-time board members. The chapter is divided into three sections that investigate (a) employment, (b) recruitment, and (c) development of females in the ESI.

(a)   The employment of females in the electricity industry

This section examines (i) female employment in the GB economy and in the electricity industry; (ii) female occupations in the ESI; and (iii) the effect of ESI employment growth and decline on the numbers of females employed.

(i)   Female employment in the GB economy and in the electricity industry

During the 40-year period from nationalisation in 1948 until privatisation, comparatively fewer women were employed in the electricity industry than in the national economy. In 1951 in the ESI (GB), females formed around 12 per cent of the workforce[1] compared with 31 per cent in the national GB population.[2] Some twenty years later, in 1971, females formed 16 per cent of the ESI workforce, compared with 36 per cent in the

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[1] MFP, *Statistical Digest 1953* (1954), HMSO, Table 88, p.109.
[2] CSO, *Social Trends No. 1* (1970), HMSO, Table 23, p.68.

national economy. A further ten years on, in 1980, the proportion of females in the ESI

had risen to 19 per cent compared with 40 per cent in the national economy. Table 1

shows the proportion of women employed in the electricity industry and in the national

economy.

Table 1

**Employment of Females in the Electricity Industry and the National
Economy (Great Britain)**

Date	Electricity Industry		Great Britain economically active	
	women in employment %	Change over period ± %	women in employment %	Change over period ± %
1951	12	-	31	-
1971	16	+33	36	+16
1980	19	+19	40	+11

Source: Electricity Industry: 1950-51, MFP *Statistical Digest, 1953* (1954), Table 88, p.109. 1971-85, NJCC (GB), 'Equal Opportunities Policy' (28.8.1985). Great Britain, Economically Active: 1951, *Social Trends No. 1* (1970), Table 23, p.68. 1971 and 1980, *Employment Gazette* (May 1987), Table 1, p.254; see also, *Labour Market Trends* (February 1997), Table 1, p.62.

The most likely explanation for the relatively small proportion of females in the ESI

concerns the industry's engineering, science and technological profile, which predisposed

it towards men. When the industry was nationalised, the employees of the 200 companies

and the 369 local authority undertakings[3] who were transferred to the new body, were

predominantly male. The main problems that faced women in the labour market were

described in Chapter 1, including the stereotyping of women's roles in society by

reinforcing attitudes in schools, which meant that girls were associated with needlework

and home economics while boys were identified with woodwork and metalwork. Girls

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[3] Hannah, *Engineers, Managers and Politicians* (1982), p.7.

also tended to leave school earlier than boys and to take arts rather than science subjects,[4] which meant they were excluded from apprenticeships and careers in technical occupations. In addition, there was a perception that 'workers were men',[5] and there was a 'moral justification' for mothers to stay at home.[6]

Table 1, above, also shows that, between 1951 and 1971, the increase in the proportion of females employed in the ESI was greater (+33%) than in the national economy (+16%). To seek explanations for these differences it is necessary to consider the economic and other circumstances prevailing during this period in relation to the electricity industry, and the type of occupations in which females were employed.

In the decade from 1948 to 1958 the electricity industry, in England and Wales, experienced a period of rapid growth in the demand for and the supply of electricity, which was accompanied by growth in the number of employees. However, during the 1970s and 1980s improvements in technology and productivity, combined with reorganisations resulted in a smaller workforce (see Chapter 2, Table 2).

The type of work in which women were employed

In the GB economy, women were predominant in providing professional care in Nursing (91%), Radiography (66%); Medical work (54%); Teaching (57%); Religion (56%) and

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[4] CSO, 'Social commentary: men and women' (1974), *Social Trends No. 5*, HMSO, p.8.
[5] R. Crompton, *Women and Work* (1997), p.101.
[6] Ibid., p.1.

Social Welfare (52%). They did not feature in the engineering professions, few in the

sciences, architecture, legal and accountancy professions.[7]   This is thought to be 'a

combination of two strategies'. First, that they were excluded, for example, from

apprenticeships in the engineering industry; and second, that many women were confined

to lower graded jobs than men, for example, becoming nurses rather than doctors, and

were a source of cheap labour in both full-time and part-time occupations.[8] The main

issue in relation to exclusion, discussed in Chapter 1, concerns qualifications and the lack

of encouragement given to girls at school to pursue other than a domestic role, or to

think in terms of a career during the 1950s and 1960s. Although the Equal Opportunities

legislation of the 1970s had an immediate impact and drew attention to inconsistencies

that favoured men over women at work, it was not sustained. It will be shown that, in

the ESI, the majority of females were employed in lower grade, lower paid work and that

more males than females left these low paid occupations.

In the electricity industry, employees were classified according to formally agreed grading

structures. Table 2 analyses the composition of each group of employees in England and

Wales.[9] Following nationalisation, industrial workers formed the largest group and

comprised at least two-thirds of the workforce. Administrative and clerical staff formed

the second largest group of around a quarter of the workforce. Engineers

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[7] Department of Employment and Productivity, *British Labour Statistics, Historical Abstract 1886-1968* (1971), HMSO, Table 106, pp.202-3.
[8] These statements were attributed to Walby (1986), in Crompton, *Women and Work* (1997), pp.11-12.
[9] A similar analysis for Scotland was not published.

comprised less than ten per cent of all employees. Managers formed the smallest group, comprising one per cent, or less, of the workforce.

Table 2

Total Employees in the Electricity Industry (E&W)
Occupational Classification

Date	Managers & Higher Executive %	Technical & Scientific %	Admin, clerical, sales accountancy %	Industrial %	Technical trainees & apprentices %	England & Wales (000s) No.	Managers, Eng., Admin & Clerical %	Industrial, trainees & apprentices %
1949		31 ①		69 ②		147.1	31	69
1952	0.7	8	23	64	4	169.0	32	68
1960	0.8	9	22	64	4	188.6	32	68
1970	0.9	13	24	59	4	196.9	37	63
1980	1.0	16	28	52	3	158.7	45	55
1989	1.0	17	29	51	2	131.1	47	53

Note: ① Technical and scientific staff were combined with the executive, clerical, accountancy and sales staff (31%). ② Industrial staff were combined with trainees and apprentices (69%).
Source: EC, *Handbook of Electricity Supply Statistics, 1989* (1990), Table 54, p.98.

The number of employees increased from 147,000 in 1949 to 197,000 in 1970. In 1989, some 40 years after nationalisation, and on the eve of privatisation of the industry, the number of employees was some 16,000 less than in 1949. It is also clear from Table 2 that as the proportion of industrial workers and trainees declined, the number of white-collar workers increased, which had implications for the employment of females. The next section analyses the nature of female occupations in the electricity industry.

(ii)   Female occupations in the electricity industry

The types of jobs undertaken by employees of the nationalised electricity industry are classified into two broad categories with either a technical or a non-technical base. Unfortunately, few details of occupational classification by gender were recorded except

for the early 1950s and the 1970s.

Technical group

Manual/industrial posts

In 1950 the ESI (GB) employed some 175,655 people. The majority (68%) of them were manual workers classed either as 'operatives'[10] (67%) or as canteen workers (1%). These jobs were horizontally segregated. Females formed just 2 per cent of operatives but nearly all of those of those working in canteens were women (98%).[11] It will be recalled from Chapter 2 that employment as an operative had implications for training and career progression to the engineering grades in the ESI.

Engineering posts

A small proportion of females in Britain had undertaken a technical education following the First World War, so that there were relatively few females who were suitably qualified to consider a technical career in the ESI during the fifties and sixties. Between 1923 and 1950, of the full time students at university taking science courses, the proportion of females was either four or five per cent. During the same period, the proportion of females who were taking engineering and technology courses was negligible.[12] It is not surprising then that the proportion of females employed in scientific and engineering

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[10] These were unskilled, semi-skilled or skilled personnel, subsequently classified as Manual or Industrial employees.

[11] MFP, *Statistical Digest 1952* (1953), Table 88, p.109.

[12] *Statistical Abstract for the United Kingdom, No. 83*, July 1940, HMSO, Table No. 364, p.51. *Annual Abstract of Statistics, No. 84, 1935-1946* (1948), HMSO, Table 120, p.100. *Annual Abstract of Statistics, No. 89* (1952), HMSO, Table 111, p.92.

occupations in Great Britain in 1966 was also negligible.

Table 3 analyses the numbers of females who were classified into engineering occupations in the British economy and in the ESI. It can be seen from the table that female engineers formed less than one per cent in both the British economy and ESI and that the proportion of female engineers in the ESI (0.6%) was marginally higher than female engineers in the British economy (0.4%). However, the ESI female employees and their predecessors were unlikely to have been qualified engineers but were more likely to have been employed in computing and research occupations.[13]

Table 3

Scientific and Engineering Occupations: Great Britain 1966 and the Electricity Industry 1971

Technical workers		Females		Males		Total
	thousands	No.	%	No.	%	No.
GB Scientific & Engineering Occupations		0.6	0.4	151.8	99.6	152.4
Electricity Industry Engineering Staff:		0.2	0.6	30.0	99.4	30.2

Source: GB 1966: Department of Employment and Productivity (DEP), *British Labour Statistics, Historical Abstract 1886-1968* (1971), HMSO, Table 106, pp.202-3. ESI 1971: NJCC (GB), Equal Opportunities Policy (1985), EC archive.

Non-technical group

In 1953, of the 179,000 employees in the ESI (GB), a quarter (24%) were graded within the combined category for the higher and lower graded clerical posts known as the 'Executive, Clerical, Accountancy, Sales etc.,' group of employees. Approximately 17,000 (39%) of these posts were occupied by females.[14] This was less than the

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[13] This was a supposition made by the Electricity Council in July 1986 when it was considering the employment of women in engineering.

[14] Calculated from MFP *Statistical Digest 1953* (1954), Tables 100, 113, 115, and *Handbook of Electricity Supply Statistics* (1985).

equivalent proportion of women in the combined clerical and professional groups (65%) in the British economy, in 1966.

Table 4 shows that the electricity industry employed proportionately fewer females in both higher professional (6%) and lower clerical (59%) graded posts than the national economy (17% and 67%, respectively).

Table 4

Occupations of Clerical and Professional Workers

Occupation	GB Economy 1966						GB Electricity Industry 1971					
	Females		Males		Total		Females		Males		Total	
Thousands	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Clerical	2,231	67	1,089	33	3,320	95	26.0	59	18	41	44	86
Professional	29	17	137	83	165	5	0.4	6	6	94	7	14
Total	2260	65	1226	35	3485	100	26.4	52	24	48	51	100

Source: GB 1966: DEP, *British Labour Statistics, 1886-1968* (1971), Table 106, pp.202-3. ESI 1971: NJCC (GB), 'Equal Opportunities Policy' (1985), EC archive.

Managerial group

In 1971, the ESI employed just 5 female managers out of some 1,900. This represents a quarter of one per cent (0.26%) and compares with 7 per cent of females in the British economy who were employed as administrators and managers. Table 5 analyses, by gender, the number of managers in the British economy and the ESI.

Table 5

GB Administrators and Managers 1966 (excluding employers and self-employed) and ESI Managers 1971

GB Administrators and managers (1966) *thousands*	Females		Males		Total
	No.	%	No.	%	No.
Managers	21.8	9	215.2	91	237.0
Managers in engineering and allied trades	3.4	3	111.7	97	115.1
Sales managers	3.8	4	103.9	96	107.7
Managers in building & contracting	2.9	4	70.6	96	73.5
Personnel managers	4.3	28	10.9	72	15.2
Company directors	0.6	21	2.2	79	2.8
Total:	**56.6**	**7**	**699.3**	**93**	**755.9**
Electricity Industry Managers (1971)	①		**1.9**	**100**	**1.9**

Note: ① There were 5 female managers representing a quarter of one per cent (0.26%) of all ESI managers.

Source: DEP, *British Labour Statistics, 1886-1968* (1971), Table 106, pp.202-3.

(iii) The effect of ESI employment growth and decline on females employed

Growth in ESI employment

During the electricity industry's period of growth, 1951 to 1971, the number of employees grew by some 13 per cent, from 181,000 to 205,000 employees. During the same period, the number of female employees increased from 21,000 to 33,000, an increase of 57 per cent. Table 6 analyses the distribution of total employees and females within each occupational group in 1951 and 1971. It can be seen that the manual worker group formed a smaller proportion in 1971 (minus 7 percentage points) whereas the engineering group was larger (plus 6 percentage points) than in 1951. In each occupational group there was little change in the proportion of female employees who were concentrated within the non-technical administrative and clerical graded posts.

Table 6

Female employees as a proportion of total employees
Electricity Industry (GB)

Date	1951		1971	
Employee type	Total %	Females %	Total %	Females %
Manual/Industrial	67	19	60	18
Engineers	9	*	15	1
Admin & Clerical	24	81	25	80
Managers	Not	recorded	2	*
Total (thousands)	**181**	**21**	**205**	**33**

Notes: * means that the proportion is less than 0.5 per cent. Engineers: before 1953 the technical and scientific staff were combined with the executive, clerical, accountancy and sales staff. The 1971 proportions have been used as a guide to estimate the total number of females who could have been employed in this group. Managers, 1971: 5 females were managers

Source: 1951: MFP, *Statistical Digest 1952* (1953), Table 88, p.109. 1971: EC, NJCC (GB), 'Equal Opportunities Policy' (1985), EC archive.

Decline in ESI employment

During the period 1971 to 1985, total employment in the ESI decreased by over a quarter (27%) from 205,000 to 149,000 employees. Female employment declined by some 4,000, as comparatively fewer females worked in manual or lower clerical jobs. However, more males than females left these relatively low paid occupations. Table 7 shows the effect on each occupational group.

It can be seen that the number of industrial workers decreased by over 40,000 (34%) employees. The proportion of females employed in this group declined from 5 per cent in 1971 to 4 per cent in 1985. The number of engineers decreased by 5,000 (17%). The number of females employed in engineering occupations remained unchanged but as a proportion of all engineers, rose marginally from 0.6 per cent in 1971 to 0.8 per cent in 1985. In the higher clerical graded posts the number of employees increased by some

4,000 (57%). Female employment in the higher clerical posts, which had started from a

low base, increased fivefold from some 430 (6% of all posts) in 1971 to 2,632 (24%) in

1985. The number of lower graded clerical posts declined by 13,000 (31%). In contrast,

the number of females declined by less than four thousand (13%). As a result, the

proportion of females carrying out the lower clerical jobs increased from 59 per cent in

1971 to 74 per cent in 1985. The number of managers declined by one-fifth (20%) from

1,900 in 1971 to 1,500 in 1985. Over the 15 year period, the number of female managers

doubled, from 5 females (0.3 per cent of all managers) in 1971 to ten females (0.7 per

cent) in 1985.

Table 7

Female employees as a percentage of total employees in each category
Electricity Industry (GB)

Employee type	1971				1985			
	Total		Females		Total		Females	
thousands	No.	%	No.	%	No.	%	No.	%
Manual	122.0	60	6.0	5.0	81.0	54	3.5	4.0
Engineers	30.0	15	0.2	0.6	25.0	17	0.2	0.8
Higher Clerical	7.0	3	0.4	6.0	11.0	7	2.6	24.0
Lower Clerical	44.0	21	26.0	59.0	31.0	21	23.0	74.0
Managers	1.9	1	①	0.3	1.5	1	①	0.7
Total	**205.0**	**100**	**33.0**	**16**	**149.0**	**100**	**29.0**	**19.0**

Note: ① Managers: 1971: 5 females classed as managers. 1985: 10 females classed as managers.
Source: EC, NJCC (GB), 'Equal Opportunities Policy' (1985), EC archive.

The investigation into the failure of the ESI to promote females to top management posts

continues in the next two sections, which examine female recruitment and development.

(b)   Recruitment of females into the electricity industry

Section (a) compared the employment of females in the national economy with ESI female employees.   Chapter 1 described the problems encountered by women who entered paid employment, while Chapters 2 and 3 examined recruitment and development practices in the electricity industry.   This section investigates female recruitment and follows the same structure used in the earlier chapters by examining separately the technical and non-technical groups of employees.

Technical group

It will be recalled that the majority of recruits were selected from those leaving schools, colleges and universities; some were promoted from existing employees; and external recruits were sought to provide specialist skills that were not available from the industry's staff.   From the beginning the nationalised industry had insufficient engineers.   The industry recruited engineers by promoting student apprentices and graduate trainees. However, these measures were not adequate to meet the demand for engineers.   Entry qualifications for recruitment to the industry were ignored; the qualification net was lowered to allow more potential engineers to join the industry.   The industry trawled the technical group to meet the shortfall in engineering staff.   This meant there were increased career opportunities for craft apprentices and for manual workers.   Few female industrial workers, if any, could take advantage of these opportunities because most of those engaged in industrial jobs worked in canteens.

Craft apprentices

The majority of craft apprentices became electrical and mechanical fitters and meter repairers, and females were unlikely to apply for training in these horizontally segregated occupations. The recruitment publicity constantly referred to 'boys' and 'young men'. As discussed in Chapter 1, this was not an unusual perception for the 1950s when boys were expected to do woodwork and metalwork at school while girls did needlework and cooking,[15] under a 'feminine' curriculum. In the national economy, very few girls were apprenticed and those who were indentured were likely to be hairdressers.[16] The Grammar School girls mentioned in Chapter 1 who perceived that advertisements were directed at boys and men, could have been referring to the ESI. The ESI career literature emphasised 'occupational segregation',[17] or the gender roles that were expected, by specifying that boys were required for technical careers in the electricity industry. Advertisements placed in the educational press were designed to attract schoolboys while they were still at school with such captions as:

> *Intelligent and imaginative - sometimes too much so - but the Supply Industry could use him.* [18]

and, in the more popular press:

> *Young men, Get On in Electricity.* [19]

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[15] CSO, 'Social commentary: men and women' (1974), *Social Trends, No. 5*, HMSO, p14.
[16] L. Mackie and P. Pattullo, *Women at Work* (1977), p.28.
[17] Crompton, *Women and Work* (1997), p.10.
[18] R. G. Bellamy, 'A Training Policy for the Industry', in 'Summaries of Lectures of the Electricity Council's Spring School held at King's College Cambridge, 6th to 14th April 1960', p.61.
[19] Ibid., p.61.

A recruiting panel visited universities with the aim of:

Recruiting young men into the engineering traineeships. [20]

This type of advertising reflected the pervasive view at the time that 'workers were men'.[21] However, there were some female craft apprentices in the ESI. In 1956 out of a total of 5,919 craft apprentices, five were female, forming 0.08 per cent of all craft apprentices (they were most likely to be training to be cooks).[22] Some thirty years' later, in 1986, the number of craft apprentices had halved but the number of female apprentices had increased. Out of 2,480[23] craft apprentices, 29 (1%) of them were female.

Of the female employees engaged in manual occupations, a third (35%) were engaged full-time and opportunities for promotion could have arisen by recruitment into the Manual Workers' Traineeship Scheme (see Chapter 2). In 1956/57, there were 170 employees training under the Scheme but there is no evidence to suggest that any of them were female. Indeed, it is unlikely that any of them were females because manual workers were employed in horizontally segregated occupations. In addition, as discussed in Chapter 1, females were not expected to have careers; it was believed that there was no point in training them because they would get married, have children and the

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[20] Ibid., p.61.
[21] Crompton, *Women and Work* (1997), pp.101-103.
[22] NJAC, 'Carr Sub-Committee, Recruitment and Training of Young Workers: Replies to questionnaire I. Recruitment and vocational training of apprentices' (1956) (ETE) 82, EC archive.
[23] EC, 'Education & Training in Electricity Boards' (1986), p.17, Table 6, EC archive.

expenditure on them would be lost.[24] There was also 'age discrimination',[25] an age barrier that would deter any women who had returned to work after bringing up a family, from applying for training:

> *Experience suggests that it will not normally be advisable to select men above the age of 35 for these awards, though this upper limit need not be rigidly applied.* [26]

In addition, although the electricity industry was desperate to seek potential engineers from the unskilled grades, the scheme literature did not encourage females to apply but overlooked them. It will be recalled from Chapter 1 that this type of gendered literature had been identified by Grammar School girls who decided to avoid careers in those fields that referred to boys and men. Females were not regarded as potential recruits into the engineering grades via the Manual Workers' Traineeship Scheme.

Engineering posts

The electricity industry was concerned about the shortage of engineers and sought desperate measures to recruit more potential engineers by selecting those without the appropriate qualifications and trawling the industry for those with potential. It did not make efforts to recruit females as potential engineers. In the mid-sixties the subject of female engineers was openly discussed on the industry's national consultative body and the industry finally confirmed that:

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[24] Mackie & Pattullo, *Women at Work* (1977), p.96.

[25] Jackson, *Problems facing qualified women returners*, p.102, in Firth-Cozens & West, 'Women at Work' (1991).

[26] NJAC, 'Manual Worker Traineeship Scheme' (21.10.1954), Appendix II, p.30, EC archive.

Not enough attention had been paid in the past to women as a source of recruitment for the industry's engineering staff. There were still very few practising women engineers in this country and while this could be attributed in part to the outlook in the schools the supply industry still had a responsibility to see that as many women as possible were recruited to the kinds of technical job most appropriate for them. [27]

Non-technical group

Clerical posts

The industry's career literature confirmed that

In all posts, women enjoy financial equality with men. [28]

However, certain posts were clearly consigned to women or girls. Some posts referred to men only and others were open to both men and women. [29] Female-only posts usually applied to such posts as shorthand-typists, typists, machine, telephone and teleprinter operators, drawing office girl tracers and demonstrators. These posts accounted for about 40 per cent of all recruits under 21. If any of this group had career ambitions, their first step would have meant a change in career followed by, for some, acquiring qualifications, by which time their peers and new recruits would have overtaken them in work experience, personal networking communications and in other ways that advanced their careers.

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[27] NJAC, ETC (30.6.1965), Minute 640(iii), EC archive.
[28] EC, 'Careers in Electricity Supply' (1962), EC archive.
[29] C. Cassell, *A woman's place is at the word processor: technology and change in the office*, pp.172-175, in Firth-Cozens & West, 'Women at Work' (1991).

Part-time workers

There were no career breaks[30] for women returners[31] in the 1950s. The social factors that predominated in the 1950s, and for the next couple of decades, resulted in the perception of distinct roles for males and females. Males were seen as the breadwinners who had careers. Females, on the other hand, were seen to get married and have families to look after.[32] Since the 1950s women's employment has grown while the reverse has been the case for men but the main reason for the expansion in women's employment, identified in Chapter 1, is due to part-time workers.[33] It can be seen from Table 8 that in the ESI (E&W), in 1985, some 5,775 (29%) females employees worked part-time in industrial or clerical grades.

Table 8

ESI (E&W) - Part-Time Employees - 1985

Grade	Male		Female		Total	
	No.	%	No.	%	No.	%
Industrial	65	31	1865	32	1930	32
Clerical	144	69	3910	68	4054	68
Total	209	3%	5775	97%	5984	100%

Source: EC, 'Equal Opportunities Policy - Employment of Women' (2.10.1986), Industrial Relations Committee, Paper No. 703, EC archive.

Over half (53%) of women employed in industrial grades worked part-time, and over three-quarters (77%) were employed in the lowest paid industrial unskilled occupational

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[30] The term 'Career-break' has been used to describe an individual, presumed to be female, who decides to spend time in activities surrounding child development rather than organizational development. Definition extracted from B. Alban-Metcalfe and M. A. West, *Women managers*, p.155, in Firth-Cozens & West 'Women at Work', 1991.

[31] D. F. Jackson, *Problems facing qualified women returners*, pp. 98-110, in Firth-Cozens & West 'Women at Work' (1991).

[32] Firth-Cozens & West, *Women at Work* (1991), p.9.

[33] Crompton, *Women and Work* (1997), pp.25-35.

grade and were likely to have been employed as canteen attendants. Out of 3,910 female part-time lower graded clerical employees, some 2,897 (74%) were employed in the electricity board retail shops. Around one-fifth (22%) were employed as clerks, and the remaining 153 (4%) were trainee sales staff. Just 18 of the female part-time staff held higher clerical (PAG) grades. Many of the part-time employees had been in the industry for long periods, see Table 9, and it is unlikely that there were any career prospects for them. A third (33%) of the female part-time employees had been employed for 10 years or more. One-fifth (21%) had worked for 10-14 years, others had worked for 15-19 years (9%), 20-24 years (2%) or 25 years and over (1%). This means that some commenced their employment in the 1960s, or earlier, and did not benefit from the Equal Opportunities legislation until it was introduced in the 1970s.

Table 9

ESI Female Part-Time Employees - 1985
Length of Service

Type of Employee		Years of ESI Service					
		0-9	10-14	15-19	20-24	25 +	Total
Administrative & Clerical							
Professional & Admin.(PAG)		12	2	3	1	0	18
Clerical (Grades 1-7)		325	342	138	17	20	842
Other Clerical & Sales		2293	486	219	38	14	3050
Sub-total		2630	830	360	56	34	3910
	%	67	21	9	1	1	68
Industrial							
Bands 1-5		1215	379	186	61	24	1865
	%	65	20	10	3	1	32
Total		3845	1209	546	117	58	5775
	%	67	21	9	2	1	100

Source: EC, 'Equal Opportunities Policy' (1986), EC archive.

Arts graduates

The ESI sought Arts graduates to succeed people in senior administrative and non-

technical managers' posts, again these were referred to in gender specific terms and were

an implicit deterrent to potential female applicants:

> Many Boards prefer to recruit him from outside to fill a specific post, rather than to engage him directly he comes down from the university. [34]

Some boards and divisions did, however, recruit newly graduated men or women,

particularly to the Secretarial and Accountancy Training Schemes and a number of Arts

graduates were recruited as administrative trainees at the headquarters of both the

Electricity Council and the CEGB.[35] Although the accountancy profession had acquired

a reputation for its male dominance,[36] it is not known whether any of the 1960s

accountancy trainees were female. In 1985, in the ESI, there were equal proportions,

around 170 males and 170 females working in accountancy at the top end of the lower

clerical grades, grades 6/7.[37]

(c)   Development of female employees in the electricity industry

This section examines the development of female employees in two parts: (i) formal

training schemes, and (ii) self-development schemes. It will be recalled from Chapter 3

that the electricity industry provided a wide range of formal training schemes for technical

and non-technical staff. In addition, for those employees not recruited to the formal

training schemes, an alternative method of study was provided by the Educational

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[34] EC, 'Careers in Electricity Supply' (1962), EC archive.
[35] Ibid.
[36] Matthews [et al], Priesthood of Industry (1998), pp.76-77.
[37] EC, 'ESI Qualifications Survey at the Clerical/PAG Interface' (1986), EC archive.

Incentives Scheme. Although the industry recorded the volume of training annually in statistical tables, it did not analyse trainees by gender. It will be recalled from Chapter 1 that reference was made to several key influences regarding the development of female employees. These influences included the perceptions of employers who regarded training girls as a wasted investment, the existence of class divisions within gendered groups, the importance of the father as a role model and the perception that occupations were gendered. It was also pointed out that girls had lost out on career routes through apprenticeships and engineering training because they were governed by the 'feminine curriculum' at school and were not encouraged to undertake mathematics or science subjects that were essential for such training. It will also be recalled from Chapter 3 that many male entrants who were recruited by the ESI, did not possess the requisite qualifications and they received technical training; but females were not encouraged to pursue technical work.

(i)   Formal training schemes

Technical group

Industrial posts

Although there were five girl apprentices in 1956 out of 5,918 apprentices in the industry,[38] it is not known in which areas they were apprenticed.[39] They may have been

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[38] NJAC, 'Carr Sub-Committee' (1956), EC archive.

[39] The apprentice-trained occupations in the electricity industry were listed as: Electrician, Fitter (Electrical), Fitter (Mechanical), Meter Mechanician (Repairer) and, in some areas, Jointer, Linesman, Bricklayer, and Cook. In most areas Jointers and Linesmen were trained by the 'mate' system. Source: NJAC, 'Carr Sub-Committee (1956), EC archive.

canteen staff. Cooks and assistant cooks had served four-year apprenticeships culminating with the City and Guilds examinations.[40]

Engineering posts

The IEE examined the training of engineers in 1942[41] and was criticised by the President of the Women's Engineering Society for omitting any reference to women. Universities had opened their engineering courses to females 30 years previously but it was impossible for any of the females who took engineering degrees or certificates to get workshop experience. Unless a girl could afford a university education it was impossible for her to take up engineering. Even if she went to evening school, she could not get the practical work.[42] While few organisations had a female role model,[43] the electricity industry, when it was nationalised, was fortunate in having its own role model for women in engineering occupations in Dame Caroline Haslett. Dame Caroline, a part-time Member of the British Electricity Authority, perceived, incorrectly, that women were offered the same opportunities as men to train as engineers.[44] No evidence was found to show whether any of the graduate engineering trainees were women. The industry had a number of concerns in relation to the shortage of skills. For example, retraining employees in work that was of more value to the industry than their previous jobs. The

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[40] NJAC, 'Canteen Staff Training' (28.4.1954), p.8, EC archive.
[41] IEE, *Journal* (1942), Vol. 89, Part I, pp.76-435.
[42] Ibid., p.426.
[43] Firth-Cozens & West, *Women at Work* (1991), p.44.
[44] Dame Caroline Haslett, 'Electricity - Towards Greater Efficiency: Women's Work in the Industry', (1949), talk given to the British Electricity Summer School at Magdalen College, Oxford, Electricity Authority, pp.8-14, EC archive.

loss of craftsmen from the CEGB in the three years following completion of their training. The failure to recruit more craft apprentices due to lack of facilities, rather than lack of applicants. The failure to inform employees more widely about training opportunities.[45] Finally, in response to the concern about the lack of ESI female engineers, it was thought that this was due to fewer female than male engineering students at universities, and that females might find many of the electricity industry's work places unattractive.[46] The development of female employees was discussed at the ESI's NJAC. Membership of the NJAC comprised up to sixty members but there was not one female among them to encourage or promote the employment and development of female employees. In 1969, membership of the NJAC consisted of half of the ESI's top management from the Electricity Council (6 members), the CEGB (12), and Area Boards (12). The balance comprised representatives from nine trade unions (22),[47] and employees (6) who represented the industrial, technical and clerical staff.[48]

Non-technical group

In 1963, the suggestion that female entrants should be targeted was opposed during a meeting of the 60 strong, all male, NJAC:

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[45] NJAC, ETC (5.8.1969), Minute 1162, EC archive.

[46] NJAC, 'Training of Female Staff' (1972), Report No. 56(1), p.2, EC archive.

[47] Amalgamated Union of Engineering and Foundry Workers (2), Electrical Electronic & Telecommunications Union - Plumbing Trades Union (3), General and Municipal Workers' Union (4), Transport and General Workers' Union (4), Clerical and Administrative Workers' Union (1), National and Local Government Officers' Association (2), Electrical Power Engineers' Association (4), Association of Managerial Electrical Executives (1), National Federation of Building Trades Operatives (1).

[48] NJAC, 'Membership of the National Joint Advisory Council' (17.4.1969), Appendix A, p.20, EC archive.

The intention to provide General Training for girl entrants on a selective basis only seemed more difficult to justify. The opinion was that if an entrant was worth employment in the industry then he or she was worthy of training and was likely to be a better employee as a result of such training. [49]

Some seven years' earlier, Lord Herbert had strongly criticised the electricity industry for not 'earmarking' individuals, he favoured 'unseen tabs'. Admittedly, he thought they should be put on 'the bright young men' but the specific selection of talented individuals was in his view crucial to the future management of the electricity industry.[50] It would appear that either the NJAC was made up of the 'old guard' who continued to oppose individual selection, or it was opposed to female selection *per se*. It will be recalled from Chapter 1 that during the 1950s and 1960s the government, some professions and the TUC took the view that training girls was not a viable investment and this view appears to have been adopted with regard to the targeting of girl entrants.

Clerical posts

In 1971 the ESI employed just under 44,000 clerical workers,[51] which included some 26,117 females[52] (59%). Just over half (51%) of sales trainees were female. With the predominance of females in the lower graded posts, it could be expected that females stood a better chance of promotion to the higher graded clerical posts. However, it will be shown in the next chapter that this was not the case.

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[49] NJAC, 'Scheme for the Education and Training of Clerical Staff' (18.4.1963), p.8(c), EC archive.
[50] Herbert Report (1956), p.86.
[51] Consisting of clerical workers, shorthand-typists and typists, machine operators, tracers, draughtsmen and draughtswomen; commercial staff, comprising service centre assistants and assistant demonstrators.
[52] NJCC (GB), 'Equal Opportunities Policy' (1985), EC archive.

Administrative posts

In 1971, of the 7,000 employees in the higher graded occupations, just one in sixteen (6%) were female.[53] Females formed one-fifth (20%) of administrative trainees[54] and three in ten (30%) electronic data processing (EDP) trainees.[55] Although the highest proportion of ESI female trainees were preparing for EDP occupations, in the national economy there appeared to be falling interest by females in computing courses, as the proportion declined from 25 per cent in 1979 to around 10 per cent in 1989.[56] Another example confirmed the continuing decline of female students on computing courses from 33 per cent in 1978-79 to none by 1985-86.[57] One study produced evidence that found 'women regard computing as a man's world',[58] which was substantiated in other research that found the profession had become male dominated.[59] None of the accountancy trainees were female.[60] It will be recalled from Chapter 3 that existing older employees who were studying for accountancy qualifications had to study in the evening. They were not granted day-release facilities for study that were available to other trainees.

[53] Ibid.

[54] Admin trainees at this time, comprised secretarial, legal, personnel and other professional trainees excluding accountancy and electronic data processing trainees.

[55] NJAC (1972), Report 56(1), p.17, EC archive.

[56] M. Aitkenhead and S. Liff, *The effectiveness of equal opportunity policy*, p.27, in Firth-Cozens & West, 'Women at Work' (1991).

[57] P. Newton, *Computing: an ideal occupation for women?* p.143, in Firth-Cozens & West, 'Women at Work' (1991).

[58] Ibid., p.145.

[59] Webster, *Shaping Women's Work* (1996), pp.36-9.

[60] ESITB, *Report and Accounts* (1972), p.29.

Management group

None of the senior managers who were nominated to attend the Administrative Staff College at Henley, were female. It will be recalled that of the 217 male managers who attended the General Management Course between 1949-1981, 90 (41%) of them became top managers and a quarter (24%) of this group became chairmen. Of the 388 managers who attended the Senior Managers' Course between 1977 and 1986, at least one of them was a female who subsequently left the industry.

(ii)   Self-development schemes

The Educational Incentives Scheme applied to those employees who were ineligible for training under the formal schemes due to age or lack of qualifications. Those enrolled on to the Incentives Scheme benefited from the opportunity to pursue their studies with help in the form of day or block release or financial assistance. In 1959/60 the ratio of female to male clerical employees was 60 per cent and 40 per cent, respectively, but no separate account was recorded of the numbers of male or female employees registered on the Incentives Scheme.

Industrial education - Spring and Summer Schools

Female applicants were less successful than their male counterparts in obtaining places at

the Schools. At a time when women formed one-eighth of the workforce,[61] fewer than seven per cent of them (1,800) applied for places, and one per cent of them (25) were awarded places.[62]

Educational Incentives Scheme

Among the technical staff, there were few female engineers and even fewer female industrial employees so that there was little likelihood of females in the technical group applying for assistance under the Educational Incentives Scheme. The clerical and administrative groups employed the majority of females and it was, therefore, more likely, because of the greater number of them, that females employed in these categories would have applied to the scheme for assistance in their self-development. However, it was only when the numbers that were trained were found to be insufficient to meet future demand, that women were considered as a resource as far as the technical posts were concerned. It was suggested that both men and women should be retrained:

in work which would be of more value to the industry than their previous jobs.[63]

The Scholarship Scheme - female scholars

Scholarships were made to at least 13 female applicants during the period 1952 to 1977 inclusive. Ten scholars were from the non-technical staff and the remaining three were

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[61] That is, out of 217,216 employees in the electricity industry (GB), around 27,000 were females. Figures for total employees from: *Ministry of Power Statistical Digest 1962* (1963), HMSO, Table 80, p.101. The number of females attending the schools increased from 30 in 1963 to 35 in 1964. Source: NJAC, Report (1964), p.9, EC archive.

[62] NJAC, Report (1962), p.5 (20) (b), EC archive.

[63] Ibid.

from the technical group. None of the female scholarship holders were classed as industrial employees. Females formed one per cent of engineering scholars, and nine per cent of non-technical administrative or clerical scholars. Table 10 analyses the scholarships holders by their main occupational groups. It can be seen that female scholarship holders formed three per cent of the total.

Table 10

· **Scholarship Awards 1952-1977**
Type of Employee

	Males		Females	
Technical	No.	%	No.	%
Engineering grades	220	99	3	23
Manual/industrial workers	70	100	0	0
Non-technical				
Administrative & clerical	97	91	10	77
Total	**387**	**97**	**13**	**3**

In 1955 the first successful female applicant to be awarded a scholarship, was employed at the industry's CEA Headquarters, during the chairmanship of Walter Citrine, and with Dame Caroline Haslett as a part-time member. During the period 1961-1970, seven further scholarships were awarded to females employed by the CEGB. The Area Boards did not produce any successful female scholars until 1971-1973, which may have been due to the anticipated implementation of the equal opportunities legislation. In total, one female was awarded a scholarship to every 31 awarded. Table 11 analyses the successful scholars by their employers.

Table 11

Scholarship Holders - Employers

Type of Electricity Employer	Total scholars		Female scholars	
	No.	%	No.	%
CEGB/Divisions	186	47	8	4
Area Boards	135	34	3	2
Central Electricity Authority/Electricity Council	12	3	1	8
Miscellaneous locations such as laboratories	22	5	1	4
Sub-total	355		13	
Not known	45	11	0	
Total	400	100	13	3

Note: Percentages for Total scholars for each employer are calculated on 400 scholars. Percentages for Female scholars are calculated as a proportion of scholarships awarded to their employing organisation.

Of the 400 scholarships that were awarded between 1952-1977, most of them (47%) were allocated to the CEGB. The CEGB produced the highest number of female scholars (8), which is the equivalent of one female scholar to every 23 scholarships awarded to the Board.

Table 12 analyses the scholarships awarded to Area Electricity Boards (E&W) between 1952 and 1977. It can be seen that of the 135 awards, Manweb, LEB, YEB and SEEB in total put forward a half (67) of the scholars. However, only three of the boards produced female scholars. These were LEB, EEB and MEB.

Table 12

Scholarship Awards
1952 - 1977 by Area Board (E&W)

Area Board	Scholars No.	Female scholars No.
Manweb	22	0
LEB	17	1
YEB	14	0
SEEB	14	0
NORWEB	11	0
EEB	11	1
SWEB	10	0
NEEB	9	0
MEB	9	1
SEB	7	0
SWaEB	7	0
EMEB	4	0
Total	**135**	**3**

All of the 37 scholars who progressed to senior positions in the ESI, were male.

Summary

Employment

Although the electricity industry began with a lower proportion of females among its employees following nationalisation, there was an element of catching up which was reflected in a greater increase in ESI female employees than in the national economy. However, the ESI still employed under half of the national average. By 1985 some one in six (17%) of employees worked part-time. Most part-time workers were employed in low grade jobs and/or had a long history of employment in the ESI. Both factors support the alternate views that employers created 'poor work' for women or that women demanded to work part-time to fit in with their personal needs. During the 1970s and 1980s the distribution of ESI female employees was found to be mainly in the lower

clerical grades. From the 1970s when the number of ESI employees began to decline, and during a period when the employment of women was highlighted by the Sex Discrimination Act, female employment declined at a lesser rate than male employment. In addition, the number of women in higher graded professional posts had increased three-fold, although, like female managers, they had started from a very low base (400 and 5 respectively) in 1971, which tended to magnify the subsequent increase. Male employment in the higher clerical posts increased by a quarter (25%) from a higher base (6,600). Promotion through the higher professional and engineering grades led to management appointments and those who were appointed as managers had the opportunity to be selected for top management posts. However, as late as 1985, opportunities for selection and progression were low, because there was one female manager to every 150 managers. Progression through the engineering grades was more restricted. Although there was one female engineer to every 125 engineers, the main drawback was that they were not qualified engineers, *per se*, but were employed in research and computer occupations. Thus, apart from the managerial route itself to top management positions, the most likely route for females into management would appear to be through the higher graded administrative grades. However, it will be shown, in the next chapter, that this route, too, was a male dominated preserve.

Recruitment

The career literature published by the electricity industry in the early sixties emphasised that it needed young men and that they were likely to 'get on'. By the mid-sixties, the

industry confirmed that it had not given enough attention to the recruitment of women to engineering posts. The industry's career literature stated that females received financial equality with men but many (40%) of those recruited to the non-technical clerical posts were placed in jobs that were typically undertaken by girls, such as shorthand-typists, machine operators, drawing office tracers and demonstrators. When Arts graduates were recruited in the early sixties, to succeed senior managers, again, the career literature targeted men.

Training and development

The number of female craft apprentices rose from five (0.8%) in 1956 to 29 (1%) in 1986. Employees who were recruited on to the Manual Worker Traineeship Scheme were provided with the opportunity to progress to higher posts but it is unlikely that any of these trainees were female. Females were likely to have been discouraged from becoming engineers because it was difficult for them to get workshop training and practical work. The electricity industry, from nationalisation, had its own female role model in Dame Caroline Haslett, who perceived, wrongly, that females in the ESI had the same opportunities to train as men. The electricity industry's response to a question about the shortage of female engineers referred on the one hand to the shortage of female students at universities and on the other, that females might find the industry's workplaces 'unattractive'. Discussions about the shortage of female engineers took place among an all-male NJAC comprising some 60 members. The 60 strong all-male committee was opposed to the suggestion that female entrants should be targeted for general training.

Females held some six per cent of higher graded administrative occupations. Female trainees formed 20 per cent of administrative trainees and 30 per cent of EDP staff. None were recorded as accountancy trainees, which is regarded as a male dominated profession, along with computing. It is not known if any of the graduate engineering trainees were women. None of the managers who attended the Henley College were female but at least one female attended the Senior Managers Course (she subsequently left the industry).

Self-development schemes

Some 99 per cent of applications to attend the Spring and Summer Schools were from male employees, and nearly all of them were awarded places. The Educational Incentives Scheme did not record the distribution of awards by gender. However, it was found that of the 400 employees who were awarded scholarships, just 13 (3%) were female. Of the one in ten (9%) scholars who progressed to senior positions, none were female.

It has been shown that following nationalisation, the recruitment of females to the electricity industry was not actively encouraged in a social climate where men were perceived as the breadwinners and females were perceived as homemakers. It was also shown that as employment decreased, more males than females left the lower graded clerical work. Improving skills and knowledge through training and development can lead to increased chances of career progression but, following nationalisation, there was little encouragement for females to develop. The industry had a female part-time board

member as a role model, who regarded male and female training as equal. However, her non-executive status did not give her the authority to monitor the progression of her own sex. The fact that the development of females was discussed and opposed by a 60 strong all male committee is a compelling reason for considering that females were not just overlooked but that they were excluded from opportunities for development and progression. The last point, in relation to exclusion from career progression, is examined in the next chapter.

Chapter 10. The Career Progression of Female Employees in the Electricity Industry and the Effect of Privatisation

In the last chapter it was shown that, following nationalisation, the electricity industry, which had its own female role model serving as a part-time board member, excluded females from its recruitment publicity, and emphasised that it needed male employees. Social and economic factors, prevalent at the time, perpetuated the stereotypical roles of the male breadwinner and a woman's place in the home. In the ESI all members of decision making and advisory committees were male, a factor which hindered the most fundamental efforts to target female entrants. Furthermore, there was little statistical classification by gender recorded. With these reservations in mind, this chapter investigates, in two parts, the career progression of ESI female employees. Section (a) analyses the promotion of females in the ESI during the period of nationalisation. Section (b) examines the effect of privatisation of the ESI on the career progression of ESI female employees.

## (a)	Female progression in the nationalised ESI

This part begins with an examination of the technical group's industrial and engineering graded posts.

### (i)	Technical group

Manual/industrial posts

It will be recalled that career opportunities were more frequent for technical staff than for non-technical staff because the industry was short of engineers. As a result, schemes were introduced to enable the industrial staff, with training, and

qualifications, to climb the ladder of promotion and become engineers. In 1974, in the electricity industry (England and Wales), females formed just five per cent of industrial grades. By 1986 the numbers of females working in industrial posts had declined by some 40 per cent from 4,778 to 2,868,[1] compared with a smaller decline in total industrial staff (25%). Because female industrial employees were usually employed in canteens, the decline in numbers may have been due to workplace closures. Meter reading and storekeeping jobs were performed by some 14 per cent of male industrial employees, but not females. These jobs were horizontally segregated and had never been performed by females. However, since privatisation of the ESI, female employees have undertaken these tasks. Other factors such as few female craft apprentices, few female full-time industrial employees and the perception of men's versus women's work, also meant that few females were available to undertake such jobs. In 1985, of the 500 plus apprentices who joined the ESI just two (0.1%) were females[2] and the likelihood of their progression to higher posts was, therefore, extremely remote.

Engineering posts

The majority of the ESI chairmen and deputy chairmen were engineers who had received their practical training in manufacturers' workshops such as Metropolitan Vickers and the BTH Company,[3] Rugby. The LEB chairman in 1981 was one of the first student engineers to have been trained in the ESI in 1949, together with other chairmen who received their training in MEB, SEB, South West Scotland and so on.

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[1] EC, 'Equal Opportunities Policy' (1986), EC archive.
[2] Ibid.
[3] The British Thompson Houston Company.

The "home grown" engineers were emerging in executive positions in the early eighties. However, practical workshop experience was virtually impossible for women who took engineering degrees in the 1940s,[4] although the nationalised ESI made it clear that female engineering trainees were entitled to practical workshop training, in the same way as their male counterparts.[5] Using the top management examples of career progression for the male engineers as a guide, any females with similar qualifications should have emerged in senior managerial positions in the 1980s, but they did not.

Despite the electricity industry's reassurance to women that there was a career in engineering for them, the rhetoric was not equal to the reality. Therefore, the possibility of women achieving executive positions by way of a career in engineering was unlikely to materialise. In 1960 one of the most senior and influential executives in the electricity industry said:

> Women do not become electrical engineers because facilities for their training are non-existent. [6]

And again, some five years' later, in 1965, the industry admitted that not enough attention had been paid in the past to women as a source of recruitment for the industry's engineering staff. It acknowledged that there were few practising women engineers but promised that the ESI had a responsibility to ensure that:

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[4] IEE, *Journal* (1942), Vol. 898, Part I, p.426.

[5] Dame Caroline Haslett, 'Electricity - Towards Greater Efficiency' (1949), pp.8-14, EC archive.

[6] Sir Christopher Hinton, Chairman, CEGB, 'Women in Engineering', address to the 30th Anniversary Dinner of the Bristol Branch of the Electrical Association for Women, in 'Electricity', Vol. XIII (January-December 1960), p.151, EC archive.

As many women as possible were recruited to the kinds of technical job most appropriate to them. [7]

However, there was an example where one female, Mrs Maple, had obtained an HNC in electrical engineering by studying at evening classes three nights a week. Before vesting of the industry, she was the private secretary to the Purchasing Agent of Edmundsons Electricity Corporation Limited, and when her boss was appointed to a senior officer position in the nationalised BEA, she remained with him as his private secretary.[8] In theory, the HNC qualification could have enabled Mrs Maple to start a new career in the engineering grades with opportunities for career progress (see Chapter 3). Instead, the industry publicised her combined studies, secretarial work, the husband to look after and the home to run as:

An inspiration to others; the excuse of "no time" is definitely "out". [9]

Not for Mrs Maple career progression or promotion. She was used in these circumstances as a model to perpetuate what was expected of female employees in the ESI; not what she could become. In the nicest possible way, a tribute was paid to her success and this tribute carried the implicit message that this was the woman's place,[10] the woman's role in the electricity industry was thus typified as hardworking, subservient and ultimately supporting her boss, with no mention of career aspirations. It is not surprising that women did not feature in career progression to executive roles through the engineering route. On the one hand there was the example of Mrs Maple who was publicly encouraged to remain in her caring role, followed some fifteen

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[7] NJAC (1965), ETC, Minute 640 (iii), p.10, EC archive.

[8] British Electricity Authority, 'Our People' (September 1950), *Journal*; Vol. III, p.316, EC archive.

[9] Ibid.

[10] C. Cassell, *A woman's place is at the word processor* in Firth-Cozens & West, 'Women at Work'. (1991), pp.172-174.

years' later by the confirmation from Sir Christopher Hinton, in 1965, that facilities for women's training to become electrical engineers were non-existent.

As late as 1986, the Electricity Council could only draw conclusions about the qualifications of females employed as engineers. At that time there were 207 women employed in permanent posts within the engineering grades throughout the ESI (156 in 1974). Table 1 analyses the structure of engineering grades together with the number of females in each category. Principal Engineer was the most senior and Engineering Assistant the most junior of engineering grades.

Table 1

Engineer Graded Females in ESI (E&W) by grading structure
Approximate average salaries[1] (excluding trainees) - 1986

Grade of Engineer (from highest to lowest)	Female Engineers No.	%	Average Annual Salary £
Principal	5	2	24,500
Senior	10	5	21,500
First Engineer	29	13	19,000
Second Engineer	53	24	15,500
Third Engineer	74	34	12,500
Engineer Assistant	38	17	11,000
Trainees	9	4	
Total	**218**	**100%**	**£14,500 ***
Total engineers	**22,162**	**1%**	

Notes: * Average NJB woman. [1] Salary defined as scheduled salary plus responsibility allowance.
Source: EC, Equal Opportunities Policy (2.10.1986), EC archive.

The majority of the female engineers (183) were employed by the CEGB (84%), the Area Boards employed 25 (11%), and the Electricity Council employed 10 (5%). Just 40 of these female engineers were employed at non-headquarters locations, such as power stations, from which it was concluded that they probably were qualified engineers. They may have been chemists. On the other hand, the remaining 167 who held posts in head offices were more likely to be employed on computing or research

work.[11] As a result of a peculiarity of classifying certain jobs to engineering grades rather than to the higher clerical (PAG) grades, they could have been employed as economists, statisticians, forecasters, planners or market researchers, who were not qualified engineers. The majority of female engineers (80%) were concentrated in the lower engineering grades, compared with a smaller proportion of their male counterparts (43%). Female engineers were also younger and therefore had less service and fewer qualifications than their male colleagues.[12]

(ii)   Non-technical group

In the 1980s, the lower clerical posts were graded from CA1 at the bottom end of the scale rising to CA7. School leavers entering the industry were usually recruited at the lowest grade. They were automatically upgraded if their performance was judged to be satisfactory to merit advancement, after a prescribed period of around six months to a year. After the initial automatic upgrading, all future promotions were by competitive application for vacant posts. The first major step to promotion was by entry to the higher administrative posts, the much sought after PAG career ladder which enabled an individual to rise from the lowest graded administrative post (PAG1) to the highest (PAG7), which was the equivalent of a managerial grade.

Table 2 shows that in 1971 females occupied some six in ten (59%) of the lower graded clerical posts and that by 1985 the proportion of females had risen to three-quarters (74%). Although the actual numbers employed in these posts had declined

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[11] EC, 'Equal Opportunities Policy' (2.10.86), EC archive.
[12] Ibid.

over the period by some 30 percentage points, the proportion of females had declined

by 13 percentage points compared with a decline of some 56 percentage points for

men.[13]

Table 2

Females employed in the Lower Clerical Grades (E&W)

Date	Females		Males		Total	
	No.	%	No.	%	No.	% change 1971-1985
1971	26117	59	17790	41	43907	-
1985	22695	74	7849	26	30544	(-30)

Source: NJCC (GB), Equal Opportunities Policy (28.8.1985), EC archive.

With a ratio of four females to every male in the lower clerical grades, it might be

expected that females would outnumber males in promotion to the higher graded

clerical posts, but this was not the case. In an internal investigation, it was found that

though the majority of employees were females, it was the majority of males who

were promoted from the lower graded CA6/7 posts to the higher graded PAG1 post.

> *In fact men are twice as successful as women in gaining promotion from*
> *CA 4/5 and significantly more successful in gaining promotion from CA 6/7*
> *and PAG posts.* [14]

The majority of employees worked in 'general areas' and the only differences between

the sexes at work was that more males worked in drawing offices while more females

worked in personnel. Females also had a higher wastage rate than males, seven

females to every three males left the ESI in 1972.[15] Finally, it was found that males

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[13] NJCC, 'Equal Opportunities Policy' (28.8.85), EC archive.

[14] EC, 'Equal Opportunities Policy' (2.10.86), EC archive.

[15] NJCC, 'Equal Opportunities Policy - Review of Effectiveness' (22.10.1982), NJCC(GB) 154, EC archive.

had a greater chance of obtaining promotion than females.[16] Table 3 shows the proportion of females leaving the industry compared with male departures.

Table 3

Female and Male wastage: 1972 and 1982
Electricity Supply Industry (England and Wales)

Date	Female		Male		Total	
	No.	%	No.	%	No.	%
1972	6978	69	3144	31	10122	100
1982	2726	63	1629	37	4355	100

Source: NJCC, Equal Opportunities Policy' (22.10.1982), EC archive.

The engineering career progression route was well established but there were few female qualified engineers compared with their male counterparts, and none of them progressed to the top posts. In the higher graded administrative posts, career paths had been developed for board secretaries and professional accountants, as well as routes for personnel managers, marketing, computer and public relations specialists. Furthermore, it will be seen from the following investigation that the higher graded administrative posts were vertically segregated. A gendered structure that changed only marginally. In 1971 females formed six per cent (males 94%) of the Professional and Administrative Grade (PAG) posts. Table 4 shows that females were concentrated in the lowest graded posts. In 1971, the lowest grade PAG1 comprised mostly females (75% of PAG females) compared with fewer males (43%); PAG2 (12% female, 17% male); and PAG 3 (10% female, 22% male). In fact, there were more males in the higher PAG5 and PAG6 posts than there were females in all of the PAG grades. Some fifteen years later, in 1985, the proportion of females occupying PAG posts had increased to 24 per cent. But the fact remains that there were still

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[16] EC, 'Equal Opportunities Policy' (2.10.86), EC archive.

more males in the highest PAG4 to PAG7 posts than there were females in all of the

PAG grades.

Table 4

Gender of PAG Graded Posts - 1971 and 1985
Electricity Supply Industry (GB)

Higher Graded Posts	1971						1985					
	Female		Male		Total		Female		Male		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
PAG7	0	0	0	0	0	0	3	*	126	2	129	1
PAG6	0	0	109	2	109	2	22	*	497	6	519	5
PAG5	2	*	349	5	351	5	56	2	796	9	852	8
PAG4	11	3	769	12	780	11	150	6	1276	15	1426	13
PAG3	42	10	1410	22	1452	21	328	12	1625	19	1953	18
PAG2	51	12	1100	17	1151	17	825	31	2078	25	2903	26
PAG1	324	75	2796	43	3120	45	1248	47	2047	24	3295	30
Total	430	6	6533	94	6963	100	2632	24	8445	76	11077	100

Note: * means proportion is less than 0.5 per cent.
Source: NJCC, 'Equal Opportunity Policy' (28.8.85), EC archive.

Table 5 analyses the proportions of females and males in each PAG grade and shows

that males formed from 90 to 100 per cent of all PAG posts in 1971. By 1985 males

were less concentrated in the lowest grades but retained their dominance in the top

three PAG posts ranging from 93 per cent occupying PAG 5 posts, to 98 per cent in

PAG7 posts.

Table 5

Females occupying PAG Graded Posts - 1971 and 1985 - ESI (GB)
as a proportion of each PAG group

Graded Posts	1971			1985		
	Female %	Male %	Total %	Female %	Male %	Total %
PAG7	0	0	0	2	98	1
PAG6	0	100	2	4	96	5
PAG5	*	99	5	7	93	8
PAG4	1	99	11	11	89	13
PAG3	3	97	21	17	83	18
PAG2	4	96	17	28	72	26
PAG1	10	90	45	38	62	30
Total	6	94	100	24	76	100

Note: * means proportion is less than 0.5 per cent.
Source: NJCC, Equal Opportunities Policy' (28.8.85), EC archive.

Table 6 analyses the distribution of females across the engineering and administrative grades in 1986[17] and shows that the career progression of female administrative staff was less advanced than their engineering sisters, despite the fact that there were more of them. Female engineers formed one per cent of engineering grades; female administrative staff formed 25 per cent of the Professional and Administrative Grades. However, whereas 20 per cent of female engineers were found in the top three posts, only 3 per cent of females were found in the top three PAG posts.

Table 6

Distribution of Females in Engineering (NJB) and PAG (NJC)
Posts in ESI (E&W) - 1986

NJB Grade (from highest to lowest)	1986 NJB (E&W) females		NJC Grade (from highest to lowest)	1986 NJC (E&W) females	
	No.	%		No.	%
Principal	5	2	PAG7	6	*
Senior	10	5	PAG6	27	1
1st	29	13	PAG5	52	2
2nd	53	24	PAG4	150	6
3rd	74	34	PAG3	331	13
EA	38	17	PAG2	769	31
Trainees	9	4	PAG1	1131	46
Total females	**218**	**100%**	**Total females**	**2466**	**100%**
Females: % of total		1%			25%
Total males	21944	99%		7466	75%
Total NJB/PAG staff	22162	100%		9932	100%

Note: * means proportion is less than 0.5 per cent.
Source: EC, 'Equal Opportunities Policy' (2.10.86), EC archive.

The Electricity Council, with the agreement of the electricity boards, had undertaken research throughout the industry to examine the career prospects of men and women who progressed from the lower clerical into the higher administrative posts. The study could not provide reasons for the more rapid promotion of males and suggested that the rate of male advancement was likely to continue, and that females were discriminated against. The main findings from the survey included the fact that:

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[17] Ibid.

During 1984/85, no combination of factors identified in the report, including qualification levels, was sufficient to explain the higher promotion rates experienced by male staff at the clerical/PAG interface. Consequently the report does not provide evidence to suggest that discrimination did not occur at that level during the year. Such a conclusion is concerning since it gives credence to the view that the ESI does not, even now, act within the spirit of its equal opportunities policy. The view has been expressed that the lack of women in senior posts is an accident of the past which can only be changed slowly. This report suggests that such changes will not materialise as fast as perhaps they should since it seems likely that some discrimination continues to occur, albeit less than in the past. [18]

The question of whether women were being discriminated against may have been a function of the weakness of the Electricity Council and the perpetuation of males in top management posts and on committees. When the ESI was nationalised, Sir Walter Citrine, the industry's first leader, was criticised because of the strong leadership powers that he exercised over the whole of the industry. Following reorganisation, in 1957, the industry had no central authoritative body. The Electricity Council was established as the forum for the industry and had a number of functions, one of which was the responsibility for industrial relations. But the industrial relations policies, procedures and negotiations were all made in agreement with electricity boards. The Electricity Council had no authority to command, instruct or implement industrial relations. While the Electricity Council designed the Equal Opportunities Policy and agreed it with the electricity boards, it did not have the power to ensure that the Policy was implemented. The Council had no powers to take actions or to investigate the boards; they were each autonomous self-governing bodies within the constraints of Government edicts, that paid lip service to the Electricity Council.

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[18] EC, 'NJC Qualifications Survey - Equal Opportunities' (17.4.1986), EC archive.

Males not only occupied the top management posts in the electricity industry but they, *ex officio*, sat on all the executive committees. Upward mobility for non-technical employees was illustrated in career progression diagrams. These featured the career routes for people working in the various sections and occupations within the secretarial, accountancy and commercial departments. Some board secretaries and accountants rose to top management positions; others secured extended tenure as board secretaries or chief accountants, which resulted in a ceiling that blocked promotion from below. However, this does not explain why women did not progress, except that men may have preferred to promote men. It may be the perception of the dominance of the male culture that caused women to leave the industry, or curtailed even the action of applying for promotion because they perceived that their chances of being promoted were biased in favour of their male counterparts. The first top management team that was appointed to run the nationalised electricity industry included a female part-time board member. This unusual appointment could either be regarded as the 'token woman' on the board, or to stress the importance of women's role in the industry. Although, it has been observed that:

> *She voted usually with the 'top table' of Citrine, Self and Hacking.* [19]

Some 43 female part-time board members were appointed in the period 1951-1991 (including four who were appointed in 1987-1991). This represented an average of one female part-time board member a year. At five-year intervals, including reappointments, the total becomes 75 females (10%) on the boards, compared with 775 male part-time board members (90%). Some electricity boards were more likely

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[19] Hannah, *Engineers, Managers and Politicians* (1982), p.13.

to appoint female part-time board members than others. Before 1972 eight of the sixteen electricity organisations had no female part-time board members. During the subsequent period that led up to privatisation all electricity boards had appointed a female part-time board member, except for the CEGB. Some boards such as the London Electricity Board, reappointed female part-time board members over four successive periods.

The effect of privatisation, considered in the next section, reduced the number of female part-time board members. Female part-time representation on boards in the private sector was similar to female representation as part-time board members in the electricity industry. Some female directors had more than one directorship in the private sector, which emphasises the confidence of business in their abilities.

(b)   The effect of ESI privatisation on women's progression to the board of directors

This section examines some of the changes that have affected the ESI as a result of privatisation. Some of the more immediate changes affected the number and the status of managers, not only as a result of the abolition of the negotiating bodies, such as the NJM, but because of activities such as mergers and take-overs. These activities obviously had repercussions for board membership.

The status of the title 'manager' became widely used

One of the first casualties of privatisation was the abolition of the ESI's negotiating bodies, including the NJMC. So that one of the immediate effects of privatisation of

the electricity industry was to award the title 'manager' to a wide range of employees. The effect of the widespread use of the title manager means that it is more difficult to track the real advancement of females to the equivalent level of managerial posts that were previously constrained by the NJM Committee.

New companies established

Another effect of privatisation was the creation of new companies. Under nationalisation there had been 16 electricity organisations in Great Britain. Under privatisation the number of organisations that emerged from those previously in existence grew to some 22 new organisations,[20] each with its own management board.

Progress to the Board since privatisation

Table 7 shows that by 1998 at least two females had been appointed as executive board members; five females served as non-executive board members and 30 females occupied senior management positions.[21]

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[20] The fourteen area distribution boards in England and Wales (12) and Scotland (2) remained operational. The Electricity Council was abolished along with the CEGB. From the CEGB emerged several new companies: National Power and PowerGen were responsible for generation and the National Grid Company was responsible for transmission. The nuclear part of the CEGB was formed into two new companies: Nuclear Electric and Scottish Nuclear. From subsequent legislation emerged British Energy and Magnox. In addition to these new companies a trade association was established, owned by the privatised electricity companies, known as the Electricity Association.

[21] The job titles of these females were found, by the writer, by examining the information provided under each of the relevant organisations listed in *Electricity Supply Handbook* (51st ed., 1998.).

Table 7

Progress of Women to the ESI Board - 1974-98

	1974 No.	1984 No.	1998 No.
Senior Managers	5	8	30
Non-Executive Board Members	14	14	5
Executive Board Members	0	0	2
Total	**19**	**22**	**37**

Source: Electrical Review, *Electricity Supply Handbook* (1998).

Type of functional appointment of senior females

It can be seen from Table 8 that the type of jobs that female ESI senior managers tended to occupy were in such functions as company secretary (20%) and finance (20%), followed by public relations (17%).

Table 8

Female ESI Senior Managers - Functional Appointments 1997-98

	No.	%
Company Secretary/Legal	6	20
Finance/Audit/Treasurer	6	20
PR/Communications/Public Affairs	5	17
Development/Business/Group	3	10
Human Resources/Training	3	10
General Manager/Corporate Services	3	10
Investor Relations/IT	2	7
Customer Sales and Services	1	3
Environment	1	3
Total	**30**	**100**

Source: Electrical Review, *Electricity Supply Handbook* (1998).

Organisations appointing females

From Table 9 it can be seen that by 1998 females were employed in senior positions in most but not all electricity companies.

Table 9

Progress of Women to the Board - 1998

Companies created from CEGB	Executive Member No.	Non-Exec Member No.	Senior Manager No.	Total No.
National Power	-	1	1	2
PowerGen	-	-	2	2
Magnox Electric	-	1	1	2
British Energy	-	1	1	2
Nuclear Electric	-	-	-	0
Scottish Nuclear	-	-	2	2
National Grid	1	-	1	2
Former Area Electricity Boards				
Eastern Electricity	-	-	-	0
East Midlands Electricity	1	-	3	4
London Electricity	-	1	8	9
Manweb	-	-	1	1
Midlands Electricity	-	-	-	0
Northern Electric	-	-	-	0
NORWEB	-	-	-	0
SEEBOARD	-	-	-	0
Southern Electric	-	-	1	1
SWALEC	-	-	1	1
South Western Electricity	-	-	3	3
Yorkshire Electricity	-	1	-	1
Scottish Hydro-Electric	-	-	2	2
ScottishPower	-	-	3	3
Trade Association				
Electricity Association	-	-	2	2
Total	2	5	32	39

Source: Electrical Review, *Electricity Supply Handbook* (1998).

Job titles of senior females

Some 17 per cent of the posts held by females bore the title of 'director' but these positions did not merit a seat on the board of directors. It can be seen from Table 10 that two-thirds of the job titles of female senior managers included either the term 'manager' (47%) or 'Head' (20%).

Table 10

Female Titles - Directors, Heads, Managers 1997-98

Type of Position	No.	%
Manager	14	47
Head	6	20
Director	5	17
Company Secretary (& Asst. Co. Sec.)	4	13
Treasurer	1	3
Total	**30**	**100%**

Source: Electrical Review, *Electricity Supply Handbook* (1998).

The future for women in top posts

Within five years of privatisation the government released its 'golden share' in electricity companies. This resulted in the successive take-over of eleven (92%) of the twelve former Area Electricity Boards in England and Wales, except, in 1998, for Southern Electric.[22] The effect of the take-over of the electricity companies meant changes to the management on the boards. Two-thirds (65%) of the seventeen[23] electricity companies that were floated on the stock exchange were taken over with consequent changes to the boards of directors. Just six (35%) remained independent in August 1998: National Power, PowerGen, National Grid, Southern Electric, ScottishPower and Scottish Hydro-Electric. However, this did not preclude a female appointment to the board of American owned East Midlands Electricity; and the appointments of female non-executive directors to the boards of London and Yorkshire Electricity, also American owned. In the competitive market place where capability, potential and success lead to promotion, compared with the male dominated nationalised environment, there is potential for more female board members and the first Chief Executive Officer. It is, though, incomprehensible, why

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[22] The report and accounts of National Power recorded its shareholding in Southern Electric.
[23] Excludes British Energy.

some electricity companies were not able to produce a senior female manager (Table

11).

Table 11

Progress of Women to the Board - 1997-98
By Electricity Organisation

Companies created from CEGB	Exec. Member No.	Non-Exec Member No.	Snr. Mgr. No.	Total No.	Total staff 1990 No.	Total staff Dec. 1995 No.	Total staff 19..
National Power	-	1	1	2	16273	4716	96/ 4671
PowerGen	-	-	2	2	9430	3727	96/ 3558
Magnox Electric	-	1	1	2			
British Energy	-	1	1	2			98/ 5672
Nuclear Electric	-	-	-	0	14417	8676	
Scottish Nuclear	-	-	2	2	1734	1678	
National Grid	1	-	1	2	6442	4413	96/ 4437
Former Electricity Boards							
Eastern Electricity	-	-	-	0	9983	5750	
East Midlands Electricity	1	-	3	4	7478	4980	96/ 5099
London Electricity	-	1	8	9	6920	4376	96/ 4404
Manweb	-	-	1	1	5551	3250	
Midlands Electricity	-	-	-	0	7738	5103	96/ 5114
Northern Electric	-	-	-	0	5439	4350	96/ 3882
NORWEB	-	-	-	0	8249	7100	
SEEBOARD	-	-	-	0	6343	4139	
Southern Electric	-	-	1	1	8233	6900	96/ 3612
SWALEC	-	-	1	1	3770	2950	
South Western Electricity	-	-	3	3	5641	4000	
Yorkshire Electricity	-	1	-	1	7156	4100	96/ 4294
Scottish Hydro-Electric	-	-	2	2	3725	3480	
ScottishPower	-	-	3	3	9699	8205	
Trade Association							
Electricity Association	-	-	2	2			
Total	2	5	32	39	144,221	91,893	

Source: Electrical Review, *Electricity Supply Handbook* (1998). Total staff 1995 from *Inside Energy*, 'The UK Electricity Industry: Now we are five. Part 5: The regulated monopolies' (13.6.1996), Electrical Review, p.5.

Table 12 analyses the job titles of female board members, non-executive directors and

senior managers, by electricity company and owner, 1997-8.

Table 12

Job Titles of Female Board Members and Senior Managers 1997-98

Executive Board Members	Company	Owners
Board Member, Co. Secretary & General Counsel	National Grid	NGG
Board Member, Human Resources Director	East Midlands Electricity	USA
Non-Executive Board Members		
Non-Executive Director	London Electricity	USA
Non-Executive Director	Magnox Electric	Govt.
Non-Executive Director	National Power	NP
Non-Executive Director	Yorkshire Electricity	USA
Senior Managers		
Head of Legal Services	British Energy	BrEn.
Company Secretary and Corporate Solicitor	Magnox Electric	Govt.
Investor Relations	National Power	NP
Head of Corporate Finance and Planning	PowerGen	PG
Director of I.T.	PowerGen	PG
Director of Corporate Services	Scottish Nuclear	Govt.
Assistant Company Secretary	Scottish Nuclear	Govt.
Director of Corporate Finance	East Midlands Electricity	USA
Company Secretarial Manager	East Midlands Electricity	USA
Group Audit Manager	East Midlands Electricity	USA
General Manager, CEOs Office	London Electricity	USA
Business Implementation Manager	London Electricity	USA
Purchasing Planning Manager	London Electricity	USA
Environment Manager	London Electricity	USA
Treasurer	London Electricity	USA
Head of Accounting Services	London Electricity	USA
Group Development Manager	London Electricity	USA
Company Secretary subsidiary companies	London Electricity	USA
Head of Communications	Manweb	SP
Head of Customer Sales and Services	Hydro-Electric	HE
Head of Corporate Communications	Hydro-Electric	HE
Director of Corporate Affairs	ScottishPower	SP
Finance Manager	ScottishPower	SP
Human Resources Manager	ScottishPower	SP
Human Resources Field Services Manager	SWEB	USA
Training and Development Manager	SWEB	USA
Business Support Manager	SWEB	USA
Company Secretary and Director of Legal Services	Southern Electric	SE
Public Relations Manager	SWALEC	HYDER

Source: Titles and companies extracted from the *Electricity Supply Handbook 1998*. Details concerning the owners were found in various national newspapers and periodicals.

Summary

Women whose jobs were classified within the industrial, or manual, grades usually worked as canteen attendants or cleaners. They could have undertaken male jobs such as meter reading and storekeeping but these types of jobs did not become available to them until privatisation. These jobs were previously occupationally segregated and unlikely to have been regarded as women's type of work.

The ESI chairmen and deputy chairmen, who began their careers as engineers, obtained their practical training in manufacturers' workshops. These home grown engineers emerged in executive positions in 1980s. It was not possible for females who took engineering degrees in 1940s to get workshop training. The electricity industry stated that females were entitled to practical workshop training, equally with males. In 1960 Sir Christopher Hinton, the chairman of the CEGB, said that facilities for females to train to become electrical engineers were non-existent. By 1965 it was said that not enough attention had been paid to females as a source of engineering staff. In 1950, Mrs Maple achieved an HNC in electrical engineering through evening study but continued to work as a secretary. Her achievement was publicised but the publicity emphasised her caring role and did not encourage her to develop further or make suggestions that might have encouraged other females to emulate her achievement with a view to progression. The majority of females (80%) remained in lower engineering grades.

In 1971 females formed the majority (59%) of lower graded clerical posts. By 1985 the proportion had risen to three-quarters (74%), although the total numbers of

employees had decreased. An internal investigation found that the majority of males had a greater chance of promotion than females. In 1971, females, formed a small proportion (6%) of higher graded administrative posts, and were concentrated in the lowest graded posts. By 1985 there was some improvement: females formed almost a quarter (24%) of the higher graded administrative posts, but they remained in the bottom grades. Indeed, there were more males in the four highest graded administrative posts than there were females in all of the PAG graded posts.

Despite the tiny proportion of females in engineering posts, there was a higher proportion of them in the more senior positions in engineering than there were females in the higher graded administrative posts. Females formed just one per cent of engineering posts compared with 25 per cent of females in the PAG posts. However, some 20 per cent of females were found in the top three engineering grades compared with only 3 per cent of females in the top three PAG grades.

An internal investigation could not provide the reason for the rapid promotion of males and found females were discriminated against. Any discrimination may have been due to the federal nature of the industry and the lack of authority vested in the Electricity Council perpetuated by the continuous appointments of males to top managerial posts and on committees.

One of the effects of privatisation was the widespread use of the term 'manager'. The number of electricity companies increased from 15 to 22 with privatisation. The number of female senior managers had increased from eight in 1984 to 30 in 1998 and

two executive board members were female in 1998. Most of the female senior managers were appointed to company secretary (6), or posts in finance (6) or public relations (5). In 1998 some electricity companies did not have any senior female managers or female board representation. The post of 'director' was held by five of the females in senior management positions but this title did not entitle them to take a seat on the board.

It has been shown that there were numerous obstacles to prevent the progression of females, whether deliberate or unintended. With privatisation, females were able to perform jobs that were previously confined to men. The facilities for female engineers in the ESI were said by a top manager to be non-existent. Males had a greater chance of promotion than females and females left the industry at a greater rate.

Factors such as the advent of fewer company players in the privatised electricity industry, together with the top flight salaries paid to the senior management, will probably make the appointment of women to senior management posts even less likely, which suggests that privatisation may help to exclude women from top posts. It has been shown that women have proved their ability to undertake membership of more than one board in the private sector but that they formed an exceedingly small proportion compared their male counterparts. There have been comparatively major strides made by some electricity organisations since privatisation, when some companies have put competence and objectiveness before gender. However, bearing in mind that some electricity organisations seem reluctant to appoint females to senior positions combined with the small amount of female board representation outside the

electricity industry, and the quarter of a century that has elapsed since the introduction of the Sex Discrimination Act, with little advancement, one can only conclude that the advancement of women to board posts will be hindered. Unless their exclusion from the accession to top posts is given some impetus, industry and its effect on the economy will continue to be dominated by executive and non-executive men with a comparatively few non-executive women.

Conclusions

This thesis has investigated the development and succession of British Electricity Industry executives (top managers) during the half-century from 1948, and has examined the reasons why few female employees became senior managers, and none became board members. The research began with an outline of the historical and subsequent problems experienced by women at work, and then focused on the electricity industry. Managers did not exist as an occupation but emerged from ESI procedures that began with recruitment into the industry, training, development and career progression. Another facet of the investigation concerned the industry's methods of developing managers and the opinions of those managers to their development. The intriguing fact that some managers became top managers while others did not was investigated by making comparisons of the common characteristics of those who rose to the highest positions in the ESI. In trying to identify why females did not reach the topmost posts in the electricity industry an examination was made of their employment, occupations and career progression during nationalisation and privatisation. The main body of the thesis was divided into three parts. Part 1 dealt with female employment and the origins of electricity industry managers. Part 2 examined the development of electricity industry managers. Part 3 analysed the results of management succession and the progress of female employees.

Part 1 of this thesis dealt with the problems experienced by women entering the labour market and investigated the source of ESI managers by examining recruitment and development. The discussion on women in the labour market examined three

key areas: (1) a brief historical review of women's employment; (2) their development by means of qualifications and training, necessary for successful careers; and (3) some of the main problems encountered by females in the labour market. Protectionism, exclusion and reinforcement governed women's entry to the labour market and the difficulties they encountered. Those culpable formed an alliance of government, employers, trade unions, employees and husbands. The term 'plausible subterfuges' was used to describe the ways in which male alliances served to exclude women. Females were late starters in gaining qualifications as a result of perceptions regarding 'a woman's role'. At the same time a 'feminine curriculum' in schools meant that girls were excluded from subjects that were necessary for them to gain access to technical apprenticeships. However, this explanation is unlikely to account for the lack of female technical staff in the ESI. More feasible is the explanation held by a group of Grammar Schools girls taking 'A' level science based subjects. They decided to avoid careers in engineering occupations because of their perception that these occupations were both horizontally and vertically segregated. By the 1990s, females were linking higher educational subjects with occupational choice. However, the majority remained in jobs that were persistently low paid and of low status in clerical and secretarial, personal services and other occupations. These features were also typical of the ESI. Part-time workers accounted for the increase in female employment but until the 1970s they were denied the employment benefits that were given to their full-time colleagues. Those part-time workers who re-entered employment after a career break usually encountered occupational downgrading to low status jobs. It was argued that, instead of eventually 'catching up' they did not return to a snapshot of the work situation as it was when they left it

and, because there were so many countervailing influences and changes, it was unlikely that they could catch up. Female part-time workers in the ESI were employed in low status clerical, catering and sales jobs and some of them were in service before the enactment of the 1970s equal opportunities legislation. Although this legislation had an immediate impact in lowering the level of occupational segregation, it did not last. The majority of women generally, and in the ESI, remained concentrated in low status and low paid jobs. While some females did infiltrate managerial and higher professional groups, again, as in the ESI, they did not become the 'Captains of Industry'. Wives and secretaries provided the financial and other necessary support during their husbands or bosses careers but their roles became subservient when the men achieved success.

Procedures for recruitment and training were essential components for potential ESI managers. The technical and specialised nature of the industry meant that it needed a continual supply of engineering and industrial staff. In order to overcome the deficit in the numbers of engineers, various actions were taken to deal with this problem. To ensure that technical employees were trained to specific standards, the industry gave urgent attention to the introduction of its own technical training schemes. School-leavers were enrolled in apprenticeship schemes. Specific age and educational qualifications were set for entry to the industry. Educational qualifications did not act as a deterrent because the specifications were often lowered in order to broaden the recruitment net and attract more potential employees. An individual's age was, however, a deterrent to apprenticeship and other formal training schemes. Another instance of searching, or trawling the industry, for potential

engineers applied to the industrial staff. For manual workers with potential, a special scheme was introduced that enabled them to progress to the engineering grades. Indeed, better opportunities existed for technical staff to climb the ladder of promotion, or to bridge the gap between the manual and engineering grades, than for non-technical staff. Rumblings of jealousy surfaced when it was perceived that perhaps some tranches of employees received more favourable treatment. Examples included the engineering union's perception that manual workers received more advantageous treatment than its own members, even though the manual worker trainees formed a very small number who were too old to be apprenticed and who had, possibly, missed the opportunity of further education. The industry's investment in the manual worker trainees appeared to pay off because this group of employees was more likely to pass their examinations than the younger craft apprentices. Another example concerned the recruitment of Arts graduates. They were to be recruited directly into the higher graded posts over the heads of non-technical employees who already saw themselves as disadvantaged compared with their technical colleagues.

Three types of ESI training schemes were investigated. These were: (1) the formally organised and approved, industry schemes, (2) the Educational Incentives Scheme and (3) the Scholarship Scheme. Training schemes for non-technical employees were introduced some time after those for technical staff because they were not in short supply. Although there were some opportunities for non-technical employees to progress, their careers were not given the same sort of attention, publicity or emphasis that was proclaimed for technical posts.

There was such a high demand for the non-formal educational schemes and that the industry was unable to supply sufficient places for the number of applicants. Examples were given of the Spring and Summer Schools, Correspondence Courses and the Scholarship Scheme. However, by application to study, whether by day/block release, or part-time evening study, employees who had the ability could improve their skills with a view to promotion. Scholarships were awarded to a tiny proportion of employees and almost three-quarters of them were allocated mostly to engineers, or manual workers. Although they were few in number, almost a quarter of the scholars left the industry after completing their courses, to such an extent that the industry had to introduce a 'moral obligation' to remain in the industry for a further two years. This group of scholars could be regarded as an elite, since one employee in four thousand was selected. Furthermore, their careers were monitored and there was every likelihood that their promotion was assured.

In Part 2, the investigation focused on the ESI's managers and on management education. Distinctions were made between the industry's managers and supervisors and how, in both cases, the industry did not have a co-ordinated approach to training either of these groups. The industry sent managers to Henley College through the Electricity Council but apart from representation on the internal Senior Managers' Course (SMC), use of the business schools was haphazard. In some instances, the use of business schools depended on the chairmen of the electricity boards. In addition, some, but not all, electricity boards had established procedures for developing managers.

A co-ordinated approach to ESI management education was introduced as a result of the Industrial Training Act. Within a relatively short time of its inception, the industry's own training board, the ESITB, ensured that a standard for management development was introduced. Comparisons were made between managers who had attended either Henley College or the internal SMC. The major distinction was that the Henley managers were more likely to become top managers than the SMC managers. An analysis of the characteristics of both groups of managers showed that the majority shared similar technical backgrounds and that two in five were members of professional engineering bodies. The Henley managers were younger, more of them held first degrees and were members of the British Institute of Management. Two additional key characteristics distinguished the Henley managers from the SMC managers. First, the Henley group attended external courses where they mixed with their peers from other industries and government. Second, they attended the first management training college at a time when management development was not widely available. Henley College itself had a unique reputation for management development, which was sustained for some years. The Henley managers were an elite group of people. It was argued that if there was widespread perception that 'going to Henley' made managers in some way special or an elite, then this might have had a 'halo' effect and enhanced the promotion of those managers. Some electricity boards fell short of the number of managers that they could have sent on management development courses. The managers who attended both courses serve as reminders of the predominance of ESI males in vertically segregated occupations. At least one of the SMC managers had been one of the few ESI female senior

managers, who subsequently left the industry. None of the Henley managers were female.

Some attempts were made by the ESITB at evaluating the 1968 Recommendation on management training, which provided a framework for developing managers, but the approach was narrow in definition. It was difficult to ensure that the Recommendation was consistently applied throughout the industry. This difficulty related to the federal nature of the industry and the lack of powers vested in the ESITB. However, anomalies were recognised and discussed, such as the inadequate appraisal process. There was bias in the training and development of managers where top managers in some boards followed the careers of particular managers. As a result, the target managers must have been perceived as being 'groomed', especially when they were selected for management training. The managers themselves probably had a heightened sense of personal distinction and favour. However, this was not a standard practice and it was, therefore, inequitable. In addition, managers were developed individually and not as a part of the management team.

From the survey of managers, it was found that top manager respondents were more mobile than manager respondents. Management thinking about the work that managers do has become more sophisticated, from Fayol to Mintzberg. However, the activities of ESI manager respondents were predominantly those from the 'classical' school of planning, preparation and communication, summarised by the acronym POSDCORB.[1] Although the ESI respondents shared similar profiles, they

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[1] Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting.

were different from their private sector counterparts in service, age, education and academic achievements. In particular ESI respondents had a grammar school rather than a public school education, whereas more non-ESI respondents had a public school education. ESI respondents also held more first and higher degrees than their non-ESI counterparts.

On the question of motivating managers, manager respondents wanted 'able superiors' whereas top manager respondents thought they would be motivated by 'recognition for work well done'. With regard to monetary motivation, top manager respondents thought their managers were more likely to be motivated by 'performance pay and rewards', 'bonuses' and 'fringe benefits'. However, manager respondents were less supportive of these motivators. Top manager respondents placed less importance on 'pensions' and 'salary differentials' than manager respondents.

Most respondents thought that chairmen, deputy chairmen and chief officers should remain in post for periods of 3-5 years only. Manager respondents, unsurprisingly, were more likely to think this than top managers. Top managers hold the key to management succession but manager respondents were often unaware of the existence of the techniques in use. Key elements such as the long-term planning and short-term monitoring of the current position were of lesser importance to the top manager group. It was also revealed that these respondents put people skills before business or commercial skills. On the eve of privatisation, these respondents felt that they lacked knowledge about corporate finance and shareholder administration. In

addition, they did not distinguish between different qualities for managers and leaders, many said the qualities were the same. Additional distinguishing characteristics between the two groups of respondents/concerned the career mobility of top manager and manager respondents. The top managers had passed through more electricity boards during their careers with the result that their experience was broader and they knew more managers and top managers throughout the ESI and elsewhere. Furthermore, they had attended external courses and handled projects in other boards. Therefore, among this group of respondents, the key characteristics that distinguished top managers from managers concerned their external development and mobility, either as a result of promotion, or secondment to another board, or a combination of both factors. It was also clear from the portfolio study of top managers[2] that those who reached top management positions were also more mobile during their careers, except in the case of chief engineers.

Part 3 dealt with the leaders of the ESI, board membership and female careers. The first leaders were the industry's youngest with the most honours. The honours were a necessary status symbol, especially in view of the meagre financial rewards and the difficulties in selecting the first team. They were perceived, and found, to be 'hardworking, experienced, elderly, and safe'.[3] The succeeding leaders were older than their predecessors and stayed in post for longer periods. The successors were also less distinguished with honours than the first leaders, which emphasises the

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[2] See Chapter 7.
[3] Both Gourvish, *British Railways 1948-1973* (1986), pp.31-32, and Chester, *Nationalisation of British Industry 1945-51* (1975), p.542, use this description. Whereas Chester refers attributes the remark to 'the Ministry', Gourvish attributes the comment to S. S. Wilson who was 'one of the Ministry officials ..'.

point that they were a symbol to replace financial rewards and to highlight the importance of the first top management posts in the nationalised industry. Managers had to be mobile to progress to the highest posts unless they were chief engineers, who, if promoted, appeared automatically to become either deputy chairmen or chairmen in their own boards. The appointment of part-time board members generally was deficient. The MMC criticised the electricity boards for the inadequate use made of part-time members. The ESI made use of some full-time employees by appointing them to part-time board membership, a practice that was subsequently frowned upon by the Cadbury Report. Even so, all but one of these employees subsequently rose to top management positions.

In this Part, too, attention was drawn to the lack of women on the boards. Few females had been appointed to the boards in a part-time capacity but the industry's record was better than the private sector, though worse than British Rail in recent years. One of the difficulties in making comparisons with other bodies concerned the large number of autonomous boards within the ESI. None of the ESI's full-time top managers, during nationalisation, had been female and the investigation turned towards anomalies that might have been due to recruitment and training, and to the technical nature of the industry. Females formed a small proportion of the ESI's workforce, from twelve per cent following nationalisation to nineteen per cent in 1980. By this time there were five female managers out of some 1,900, and 0.6 per cent (200) engineers were female out of some 30,000. Most of the non-technical female staff were employed in the lower clerical grades, with a few in the higher graded administrative posts. Opportunities for progression to top management were

limited, with one female manager to every 150 managers in 1985, and one female engineer to every 125 engineers. However, with females concentrated in the lower clerical grades there should have been more opportunities for progression via this route, but there was not. The recruitment literature was male oriented, which overlooked, excluded and possibly discouraged females. Potential female engineers would also have been discouraged by the difficulties in obtaining workshop training and practical work. In addition, it was pointed out that men dominated committees and that the only female voice had been Dame Caroline Haslett who had an inaccurate perception of the availability of training facilities for female engineers in the ESI.

A number of females worked in the ESI on a part-time basis and this arrangement may have suited them and their employers. However, due to a number of constantly changing factors it was difficult for part-time workers or those returning to work after a career break, to re-establish themselves in their former full-time occupations. Following privatisation females performed jobs that were previously carried out by male manual workers. The major step in career progression for non-technical lower clerical graded workers was by promotion to the higher graded Professional and Administrative Graded (PAG) posts. Although females were concentrated in the lower clerical jobs, their accession to a career via the PAG posts was, apart from a few token women, inaccessible. The industry conducted an internal investigation, which found that more men in non-technical jobs had a greater chance of promotion to the higher administrative posts, than females. It is probably not surprising, therefore, that females experienced higher wastage rates. Following the Sex

Discrimination Act, some females were appointed to the higher graded non-technical PAG posts but this made little difference because there were more males in the highest graded administrative posts than there were females in all of the lower graded administrative posts before privatisation. It was also noted that the proportion of female engineers was very small (1%) compared with females in the administrative posts (25%) but that there was a higher proportion of females in the senior engineering posts (20%) than females in the higher administrative posts (3%).

The final part of the investigation then moved on to the effect of privatisation on the promotion of women. With privatisation the numbers of electricity companies increased from 15 to 22. The term 'manager' became more common and obscured comparisons between the nationalised NJMC managers and the privatised managers. The number of female senior managers increased from eight to 30 and two executive board members were female.

The federal organisation of the electricity industry comprised a number of autonomous electricity boards. Their autonomy resulted in a prevailing weakness throughout the industry with regard to management education and training; a weakness that was overcome to a limited extent by the introduction of the Industrial Training Act. The Training Act enabled the industry to set up its own ESITB but its powers were limited as far as the individual and autonomous boards were concerned. The Electricity Council could only make recommendations to boards in an advisory capacity about courses of action to follow concerning training and development, it did not have the power of enforcement. The weakness of the structure of the

industry and its 'divided responsibilities' were recognised by the Plowden Committee[4] in 1975. A unified industry was proposed in place of the 'present fragmented structure'[5] but nothing further happened.

In the case of female employees, an internal investigation revealed that men were appointed to senior administrative positions to the detriment of women but the reason that this occurred was mysterious. In addition, men dominated committees that could influence female development. While male employees had perpetual role models among top managers, females had none. In this case too, bearing in mind that the Sex Discrimination Act did appear initially to make some improvements, if the industry had been unified as proposed by Plowden, it may have made a difference to the appointment of women to senior positions. However, comparisons with the private sector, in relation to the appointment of women to the board, and with British Rail, suggest that it may not have made any difference. It is clear that the electricity industry did not take a pro-active role in the training and development of its managers, or in the development and promotion of female employees. Some boards were obviously better than others in their practices. However, it is clear from the evidence that female employees were excluded from senior positions. Their appointment to the boards was therefore held back, so that the representation of females on the boards was of those employed outside the industry who joined the executive men in their capacity as non-executive women.

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[4] Lord Plowden (Chairman), *The Structure of the Electricity Supply Industry in England and Wales, Report of the Committee of Inquiry* (December 1975), HMSO.
[5] Department of Energy, *Re-Organisation of The Electricity Supply Industry in England and Wales* (April 1978), Cmnd. 7134, HMSO, p.3.

Since the privatisation of the electricity industry, two women have been appointed as full-time board members in the National Grid and East Midlands companies. However, by the year 2000 the National Grid remained the only company with a female executive board member. There is perhaps a lesson for the GB electricity companies to learn from Ireland. Ireland had only two electricity boards but had appointed three female board members. The Electricity Supply Board Ireland had twelve boards members, two of whom were women, although their board status is not known.[6] Northern Ireland Electricity had appointed one female board full-time member to the post of the Company Secretary, who joined just three other board members, the Chairman, Managing Director and Group Finance Director. The GB electricity market became the object of merger and take-over activity with the consequential surplus of redundant executives and managers. Therefore, it seems less likely that females will be appointed to the PLCs, especially as the companies grow into larger utilities that distribute gas, electricity and water and may have overseas owners. In 1997-1998 some 39 females held between them executive board membership (2), non-executive board membership (5), or senior management positions (32). Two years' later, in 1999-2000, the number of women had more than halved. There was one female executive board member, four non-executive members and twelve senior female managers.[7] The more recent evidence has thus shown that the effect of privatisation has continued to hinder the appointment of women to senior positions and their progression to the board.

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[6] Electrical Review, *Electricity Supply Handbook 2000* (53rd ed. 1999).
[7] Ibid.

APPENDIX

SURVEY OF TOP MANAGERS AND MANAGERS

EMPLOYED IN THE ELECTRICITY INDUSTRY - 1988

This survey was conducted independently and privately

by Margaret Nisbet as part of my doctoral thesis entitled:

Management Development and Succession

in the Electricity Industry 1948 - 1998:

Executive Men and Non-Executive Women

The London School of Economics and Political Science
University of London
June 2001

CONTENTS

TABLES

SURVEY OF TOP MANAGERS AND MANAGERS EMPLOYED IN THE ELECTRICITY INDUSTRY - 1988

INTRODUCTION

This appendix sets out the objectives and methodology of a survey that was undertaken among top managers and managers employed within the electricity supply industry. Selected findings are used in Chapter 6(b) of the thesis.

1.   Objectives

The main objectives of this survey were (i) to investigate management development and succession in the Electricity Industry and (ii) to identify differences in perceptions that distinguish top managers from managers.

2.   Methodology

This part describes the design of the survey and comprises five key sub-sections:

(i) sample selection; (ii) questionnaire design; (iii) despatch of letters and questionnaires; (iv) questionnaire response rate; and (v) bias.

(i)   Sample Selection

This sub-section deals with the way in which top managers and managers were selected for inclusion in the survey.

Sampling frame for top managers

At the time of the survey, the Electricity Industry comprised some 16 electricity organisations, each with its own top management. There were fourteen electricity distribution boards in England and Wales (12) and Scotland (2). In addition there was an electricity generating board and a forum for the boards, the Electricity Council. The management structure of the boards comprised a chairman, deputy chairman and chief officers, who are classified as 'top managers'. The top management structure at the Electricity Council comprised a chairman, deputy chairman, members and directors. During the design stage of the survey, there were approximately 142 top managers in the Electricity Industry which was of a size that each member should be contacted. The reasons for reaching this decision were that (1) these people were extremely busy with privatisation plans and meetings and had limited time to spare; a questionnaire would not take priority but would constantly give way to other more immediate and necessary business. (2) Because the questionnaire appeared to be lengthy, this was likely to reduce the response rate. (3) Finally, a figure of around 50% was generally expected[1] in response to self-completion questionnaires provided that it 'was not too demanding'. Because of the length of the questionnaire, expectations of a response were reduced to 40% so that from a population of 142 the best result that could be expected in a period of stability would be around 56. Therefore, in order to obtain a meaningful result from these busy leaders who were preparing for privatisation, it was necessary to contact each top manager. For each

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[1] S. Crouch, *Marketing Research for Managers* (1985), p.103.

organisation, the most recent annual report was used as the sampling frame for this population supported by the 1988 Electricity Supply Handbook.[2]

Sampling frame for managers

The title of 'manager' in the Electricity Industry during the period of nationalisation was limited to those employees whose terms and conditions of employment were set out in the formal Agreement covering managerial (NJM) staff, in the National Joint Managerial and Higher Executive Grades Committee.[3] According to the Electricity Council's March 1988 Monthly Manpower Report, there were 1,573 managers (NJM graded and above). Some 496 were employed in the 12 Area Boards (in England and Wales), 760 in the Central Electricity Generating Board (CEGB) and 124 in the Electricity Council: that is a total of some 1,380 managers employed in England and Wales. An additional 193 managers were employed by the Scottish Boards. The names of managers and their posts were extracted from the Electrical Times Handbook[4] (1988) and compared with the posts set out in a manpower report. The CEGB had undergone a reorganisation but had not published the names of those who were to fill the managerial posts. The 1988 Electricity Supply Handbook[5] gave details of the new CEGB structure, but not all posts had been finalised. However, up to date information was identified in the June 1988 CEGB telephone directory which gave details of all the departments and all the managers within the departments.

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[2] G. A. Jack (Editor), *Electricity Supply Handbook* (41st ed. 1988).
[3] This body was established in 1951, later than the bodies for engineering, industrial and clerical and administrative employees, to handle the terms and conditions of managerial staff.
[4] Jack, *Electricity Supply Handbook* (1988),
[5] Ibid.

Data processing was to be carried out manually and it was essential to select a sample size that was not only manageable but one that would also produce a robust response to enable meaningful results. Factors taken into account in reaching a decision were: (1) the length of the questionnaire; (2) the potential response rate of 40% for a long self-completion postal questionnaire; and (3) the knowledge that numbers of managers within the ESI had declined since March 1988. As a result of these factors, a random sample selection was made of one manager to every six managers in post. From a population of 1,573 managers, this would result in a sample size of 262; the best response that could be expected was 105 in a period of stability. However, the primary sample was subsequently adjusted because it was found that some managers were no longer in post. The final sample size was 220, which was expected to produce a response of some 88 managers at best.

It was also necessary to ensure that in the electricity distribution boards engineering managers were not over-sampled. In addition, all females were contacted whose job title included the word 'manager'. Six female managers were identified from a search of the Electrical Times Handbook.[6]

(ii)   Questionnaire design

The core questionnaire was designed to investigate top managers' and managers' backgrounds and their roles, including: their experience of education, training and career progression in the Electricity Industry; their perceptions about leaders and managers; and privatisation.

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[6] Ibid.

Because of the two different types of respondents, it was necessary to vary the wording of some questions for top managers. Therefore, two versions of the questionnaire were produced, one for top managers and one for managers. The questions in which the wording was different are reproduced below. A copy of the top managers' questionnaire is appended.

Q.	TM/ Mgr.	Changes in wording are underlined
17	TM	How would you rate the following in terms of importance for motivating your managers?
17	Mgr.	How would you rate the following in terms of importance for motivating managers such as yourself?
22(a) and (b)		MEETINGS. The following statements were different.
d	TM	Board meetings.
d	Mgr.	Meetings with other managers.
e	TM	Executive meetings with Chief Officers.
e	Mgr.	Meetings with Chief Officers.
f	TM	With individual managers on specific problems.
f	Mgr.	With individual staff on specific problems.
g	TM	With groups of managers on specific problems.
g	Mgr.	With groups of staff on specific problems.
23	TM	What qualities do you look for in a manager?
23	Mgr.	In your opinion, what qualities should a good manager have?
24	TM	What qualities should a good leader have?
24	Mgr.	In your opinion, what qualities should a good leader have?
26	Mgr.	Additional statements, 10, 11 and 12, were inserted for managers only. These statements are included in Table 46.
27/28	TM	Questions 27 and 28 were not inserted in the managers questionnaire which meant that the numerical sequence of the questions in the managers questionnaire became two questions behind the question numbers for top managers. There were no further changes.

Notes: TM= Top Manager. Mgr.= Manager.

Some of the terms used in the questionnaire were defined separately in the notes to the questionnaire, also appended. These terms were:

Question	Statement	Description of terms that were defined
14(a)	4	Business Studies
14(a)	10	Business Analysis
21(a),(b)	-	Representational duties
22(a),(b)	o	Lead meetings outside ESI
22(a),(b)	p	Other meetings outside the ESI
32TM/30Mgr	20	Loss of synergy

Rating scales

Throughout the questionnaire respondents were asked to give their opinions on different topics. In order to measure their opinion and to enable comparisons to be made between the two groups of managers, five-point mono-polar rating scales were used. These scales enabled mean scores to be calculated. Examples of the scales that were defined for respondents, are set out below.

Questions 13, 14, 21, 22

Usefulness

Scale	Points
Not at all/least useful	1
Not very useful	2
Average	3
Fairly useful	4
Most useful	5

Questions 17, 27

Importance

Scale	Points
Not at all important	1
Not very important	2
Average	3
Fairly important	4
Very important	5

Questions 28, 30

Agreement

Scale	Points
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

Questions 32, 33

Good - Poor

Scale	Points
Very poor	1
Poor	2
Average	3
Good	4
Very good	5

Net usefulness scores

The net usefulness score measures the range of positive and negative opinions recorded by respondents. The score is calculated from the difference between the percentage score for 'most/fairly useful' and the percentage score for 'not very/not at all useful'. The difference between these two scores is the 'net useful' percentage score.

(iii)   Despatch of letters and questionnaires

Courtesy letter to each chairman

19 September 1988, despatch of a personal letter to each ESI chairman, which explained the nature of the survey.

Questionnaires to top managers

19 September 1988, despatch of letters personally addressed to chairmen, deputy chairmen and senior executives in the Electricity Industry, enclosing questionnaires and notes to the questionnaire.

Letter of Reassurance

3 October 1988, despatch of a letter of reassurance regarding confidentiality. Sent following the advice and guidance of an Electricity Council top manager, as a result of sensitivity to the survey expressed at ESI top management level.

Questionnaires to managers

As a courtesy and precaution, the managers letters were despatched a fortnight after those that were sent to top managers. 3 October 1988, despatch of letters, which included reassurance on confidentiality, enclosing the questionnaires and notes to the questionnaire.

Follow-up letters

27 October 1988, a reminder letter was sent to top managers.

28 October 1988, a reminder letter was sent to managers. As a result of requests from some managers to allow them extra time, a tear off slip was attached to the letter enabling the respondent to apply for extra time, and/or another copy of the questionnaire.

(iv) Response rate

Ineligibility

Some managers became ineligible to respond because they had retired or were on the point of retirement. Others were being promoted or transferred as new posts were created before privatisation. Some top managers who had been recruited from outside of the industry commented that the questionnaire did not really apply to them because of their short service.

Return of questionnaires in response to first mail-out

The response to the first mail-out was very similar. Of the 142 questionnaires sent to the population of top managers, 40 (28%) were returned. This compares with 67 (30%), out of 220 questionnaires, that were returned by the sample of managers in response to the first mail out.

Return of questionnaires in response to the letter of reassurance

It is unclear whether the letter of reassurance affected the return of the questionnaires.

Return of questionnaires in response to second mail out

In response to the reminder that they had not completed their questionnaires some 12 (8%) additional questionnaires were received from top managers, and 30 (14%)

questionnaires from managers. Table 1 analyses the number of questionnaires despatched and the response to each mailing. Of the 142 questionnaires sent to top managers 52 (37%) were returned. Of the 220 questionnaires sent to managers 97 (44%) were returned. Of the total 362 questionnaires sent out, 149 (41%) were returned.

Table 1

Return of Questionnaires

Questionnaires	Top Managers		Managers		Total	
	No.	%	No.	%	No.	%
Despatched	142	100	220	100	362	100
Response to first mailing	40	28	67	30	107	30
Response to second mailing	12	8	30	14	42	12
Total respondents	**52**	**37%**	**97**	**44%**	**149**	**41%**

The response rate, as a percentage of questionnaires sent to each organisation, is analysed in Table 2.

Table 2

Return of Questionnaires
As a percentage of those despatched to each Organisation

	Top Managers %	Managers %
CEGB	38	38
EC	47	38
12 Area Boards (E&W)	34	45
2 Scottish Boards	35	69

The response rate, as a percentage of the total questionnaires despatched, is analysed in Table 3.

Table 3

Return of Questionnaires
As a percentage of Top Managers and Managers

	Top Managers %	Managers %
CEGB	15	41
EC	14	6
12 Area Boards (E&W)	58	34
2 Scottish Boards	14	19
	100%	100%
Despatched (No.)	142	220

Note: The first column does not sum to 100% due to rounding.

Two Area Board chairmen (SWaEB and YEB), instructed their top managers not to participate in the survey. Six of the CEGB top team did not respond except through a mediating senior manager who sent answers to questions 1-11 on their behalf. The response rates are analysed in Table 4.

Table 4

Despatch and Response Rates of Questionnaires

	Top Managers			Managers			All Respondents				
	Desp.	Returned		Desp.	Returned		Despatched		Returned	
	No.	No.	%	No.	No.	%	No.	%	No.	%
SEEB	6	4	67	7	2	29	13	4	6	4
Manweb	6	3	50	5	2	40	11	3	5	3
EC	15	7	47	16	6	38	31	9	13	9
SSEB	13	6	46	18	12	67	31	9	18	12
EMEB	9	4	44	5	2	40	14	4	6	4
LEB	7	3	43	8	5	63	15	4	8	5
SEB	7	3	43	6	4	67	13	4	7	5
SWEB	7	3	43	5	2	40	12	3	5	3
EEB	7	3	43	6	1	17	13	4	4	3
CEGB [1]	21	8	38	105	40	38	126	35	48	32
MEB	10	3	30	6	3	50	16	4	6	4
SWaEB	7	2	29	5	3	60	12	3	5	3
NEEB	6	1	17	6	2	33	12	3	3	2
NORWEB	7	1	14	7	3	43	14	4	4	3
NSHEB	7	1	14	8	6	75	15	4	7	5
YEB	7	0	0	7	4	57	14	4	4	3
Total	**142**	**52**	**37**	**220**	**97**	**44**	**362**	**100**	**149**	**41**

Notes: Percentage totals may not sum to 100 due to rounding.
[1] The replies for six top managers were supplied with the answers to questions 1 to 11 inclusive only.

## (v)	Bias

Female managers

There were known to be eight female managers in post in the Electricity Industry in March 1984. The results of the survey would be predominated by males and the random sample of one in six managers was likely to omit all female managers. Six female managers were located from the Electricity Supply Handbook (1988) and each one of them was included in the survey. Two responded (33%).

Engineers in Area Electricity Distribution Boards

Because the numbers of engineers were likely to feature more than the non-engineering managers, the sample of managers was carefully checked to ensure that non-engineering managers were included the sample.

Board non-participation

In three boards out of the sixteen organisations, the chairman instructed top management not to participate in the survey.

MAIN FINDINGS

This section analyses the main findings of the survey[7] among top managers and managers in the Electricity Industry that sought to elicit their opinions about their training, development, progression and their futures when privatisation of the industry was imminent. The section begins with a description of the study and is structured to follow the design of the questionnaire. The findings are analysed in five sub-sections. These comprise: (i) a profile of the respondents, including their further education,

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[7] This survey was undertaken privately, and independently, by Margaret Nisbet, in 1988, as part of this PhD thesis.

their early training and details of their employment in the Electricity Industry; (ii) the respondents' career development in the ESI; (iii) the activities undertaken, and the qualities required, by managers and leaders in the Electricity Industry before privatisation; (iv) recruitment, selection and management succession; (v) the structure of the Electricity Industry; and attitudes towards privatisation.

The results of the survey are analysed under each numbered question. Interpretation of the results in percentage form should be treated with caution: percentages are used to facilitate comparisons between the two groups of top manager and manager respondents and some of the numbers, on which percentages are calculated, are small.

The first six questions gathered personal data about the respondents and identified their job titles, their employers, their length of employment in the Electricity Industry, their age, the number of staff they were responsible for, their honours, educational accomplishments and membership of associations. The results indicate that the respondents reflect the hierarchical spread of managers from all parts of the industry who were employed in a variety of functions and posts. In addition, age tended to correspond with length of service in the Electricity Industry. All of the top managers employed in the Electricity Industry were male.

PERSONAL DATA

(i) Profile of Respondents

Question 1. *Job Title in Industry*

Questionnaires were returned by 149 respondents, over a third (35%) from the

Electricity Industry's top managers, and two thirds (65%) from managers.   The

completed questionnaires included representation from all top management posts:

board members and chief officers.   Table 5 shows, in columns (1) and (2), the

response rate of questionnaires returned by top managers. The response rate has also

been calculated as a proportion of all top managers in the Electricity Industry, shown

in columns (3) and (4).

Table 5

Electricity Industry Top Managers
Questionnaire Response Rate

Top Managers	Replies.		All ESI top managers	
	(1) No.	(2) %	(3) No.	(4) %
Chairmen	6	12	15	40
Deputy Chairmen	8	15	15	53
Other Board Members ①	3	6	6	50
Directors:				
Engineering	5	10	15	33
Commercial/Marketing	4	8	15	27
Financial	5	10	15	33
Secretary	3	6	15	20
Other top managers	18	35	46	39
Secretary/Personnel Director	2	4		
Personnel/Industrial Relations	5	10	6	83
Corporate Affairs	4	8	11	36
Other Directors ②	7	13	29	24
Total Replies from Top Managers:	**52**	**100%**	**142**	**37%**

Notes: Column 4 is the result of dividing column (1), the number of respondents, by the number of
all ESI top managers in each function shown in column (3). Details of 'other directors' are
described below.
① Director and Chief Executive 1; Board/Central Member 2.
② Information Technology 2; Organisational Development 1; Planning and Operations 1;
Privatisation 1; Public & Overseas Relations 1; Resources 1.

As a proportion of the total number of the Electricity Industry's top managers who were in post at the time of the survey, the response rate rises to: chairmen (40%), deputy chairmen (53%) and other board members (50%).

To comply with the undertaking to preserve the confidentiality of top manager respondents, no employing organisation is given for this group of respondents.

Question 2. *Employing Organisations*

Questionnaires were returned by 97 managers and formed some 65 per cent of all respondents. Their responses are analysed in Table 6 by their employing board and the technical (59%) or non-technical (41%) nature of their jobs. It can be seen from the two final rows of the table that the distribution of respondents follows a similar trend to the proportion of total managers employed in each organisation.

Table 6

Managers - Distribution of respondents by each organisation

	CEGB		Area Boards (E&W|)		Electricity Council		Area Boards (Scotland)		Total	
	No	%	No	%	No	%	No	%	No.	%
Technical										
Engineering	16	40	7	21	2	33	8	44	33	34
District/Power Station	7	18	6	18	0	0	2	11	15	15
Commercial/Marketing	0	0	5	15	2	33	2	11	9	9
Sub-total	23	58	18	55	4	66	12	66	57	59
Non-technical										
Co.Secretary/Personnel	6	15	6	18	0	0	2	11	14	14
Corporate Development	8	20	1	3	1	17	0	0	10	10
Finance & Accounts.	2	5	4	12	0	0	3	17	9	9
Customer Services	0	0	3	9	0	0	0	0	3	3
Computing & Telecom.	1	3	1	3	1	17	1	6	4	4
Sub-total	17	43	15	45	2	34	6	34	40	41
Total respondents	**40**	**41**	**33**	**34**	**6**	**6**	**18**	**19**	**97**	**100**
Total managers employed	**810**	**55**	**530**	**36**	**122**	**8**	Not known		**1462**	**100**

Question 3. *Length of Service*

Nine in ten (92%) of all respondents had served in the Electricity Industry for periods of 10 years or more. However, some sixteen per cent of top managers surveyed had less than ten years' service indicating that they had been recruited from outside the industry, whereas few of the respondent managers (4%) were new entrants with less than ten years' service. It may be that it was necessary to recruit top managers from outside the Electricity Industry because insufficient managers had been developed to succeed existing leaders. It is also likely that the recruitment of the relatively new top managers was political, following the change of government in 1979: this speculative explanation is borne out by a further analysis which reveals that three of the top managers had eight or nine years' service (one chairman, a finance director and secretary); three had five or six years service (finance, board secretary and public relations) and two had three years service (computing and administration).

Table 7

Length of Service

Years	Top Managers		Managers		Combined Results	
	No.	%	No.	%	No.	%
<5	2	4	2	2	4	3
5 - 9	6	12	2	2	8	5
10-14	2	4	6	6	8	5
15-19	4	8	15	15	19	13
20-24	9	17	22	23	31	21
25-29	10	19	18	19	28	19
30-34	4	8	14	14	18	12
35-39	9	17	10	10	19	13
40-44	6	12	8	8	14	9
Total	52	100%	97	100%	149	100%

Question 4 *Number of staff responsible for*

This question asked respondents to state the number of staff for whom they were responsible. Table 8 shows that one third of respondents (34%) said they were

responsible for less than 50 employees. A quarter (24%) were responsible for 50-199, and two in five said they were responsible either for 200-599 (22%) or 600 and above (19%).

Table 8

Responsibility for employees

Number of employees	EC		AEB(E&W)		AEB Scotland		CEGB		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
1-49	7	5	11	8	7	5	24	17	49	34
50-99	4	3	5	3	1	1	8	6	18	12
100-199	2	1	9	6	2	1	5	3	18	12
200-599	0	0	18	12	10	7	4	3	32	22
600-999	0	0	1	1	0	0	1	1	2	1
1000-4999	0	0	6	4	2	1	3	2	11	8
5000-8999	0	0	10	7	1	1	1	1	12	8
11000-12999	0	0	0	0	2	1	0	0	2	1
47000+	0	0	0	0	0	0	1	1	1	1
Total	**13**	**9**	**60**	**41**	**25**	**17**	**47**	**32**	**145**	**100**

Respondent managers said they were responsible for large numbers of employees that are beyond the recommended span of control for managers,[8] presumably respondents meant this was as a result of using other managers and supervisors to manage smaller groups that made up the larger numbers of employees.

Question 5   *Honours, academic and honorary degrees, membership of associations.*

This question asked respondents to list their academic and other achievements, together with their membership of associations. The results are analysed under three sub-headings that examine (a) first degrees, (b) higher degrees; and (c) membership of professional associations.

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[8] E F L Brech (Editor), *Principles and Practice of Management* (1975), p.62 and p.951.

(a)   First Degrees

Over half (54%) of all respondents held first degrees and there was little difference between the types of degree held by each group of respondents (Table 9).

Table 9

First Degrees held by Respondents

First degree	Top Managers		Managers		All Respondents	
	No.	%	No.	%	No.	%
BSc	18	67	29	55	47	59
BA	8	30	17	32	25	31
LLB	1	4	2	4	3	4
BEng	0	0	1	2	1	1
Not stated	0	0	4	7	4	5
Total	**27**	**34%**	**53**	**66%**	**80**	**100%**
All Respondents	**52**	**52%**	**97**	**55%**	**149**	**54%**

(b)   Higher Degrees

Around one in five (19%) respondents possessed a higher degree but there was little difference between the types held by each group of respondents. Although it can be seen from Table 10 that proportionately more top manager (50%) than manager (37%) respondents held an MA.

Table 10

Higher Degrees held by Respondents

	Top Managers		Managers		All Respondents	
	No.	%	No.	%	No.	%
MA	5	50	7	37	12	41
PhD	3	30	5	26	8	28
MSc	2	20	4	21	6	21
MPhil	0	0	1	5	1	3
MBA	0	0	2	11	2	7
Total	**10**	**34%**	**19**	**66%**	**29**	**100%**
All respondents	**52**	**19%**	**97**	**20%**	**149**	**19%**

(c)   Membership of Professional Bodies

It can be seen from Table 11 that membership of the engineering institutions predominated over the other professional bodies.

Table 11

Membership of Professional Institutions

	Top Managers		Managers		Total	
	No.	%	No.	%	No.	%
Engineering						
CEng	29	56	35	36	64	43
IEE	29	56	29	20	58	39
IMechE	7	13	12	12	19	13
Commercial						
MInstM	1	2	2	2	3	2
Accountancy						
IPFA	3	6	0	-	3	2
CMA	3	6	4	4	7	5
CCA	3	6	5	5	8	5
Secretarial						
CIS	2	4	5	5	7	5
Solicitor	3	6	1	1	4	3
Personnel						
IPM	1	2	4	4	5	3
Management						
BIM	22	42	28	29	50	34

It can also be seen from Table 11 that over two in five (43%) respondents were Chartered Engineers, with more top managers (56%) holding this status than managers (36%). Around two in five (39%) respondents were members of the IEE, again, more top managers (56%) than managers (20%) were members. It can also be seen from the table that accountants, company secretaries and personnel specialists were less strongly represented than the engineers among respondents.

Question 6 *Age group*

Respondents were asked to select their age group from a predefined list. It can be seen from the age structure in Table 12 that almost one-third (31%) of top manager respondents were under 50 compared with half the managers (49%). A half (50%) of top manager respondents were 55 or more, compared with three in ten managers (29%). None of the top manager respondents were under 40.

Table 12

Age Structure

Age	Top Managers		Managers		Combined Totals	
	No.	%	No.	%	No.	%
Under 35	0	0	2	2	2	1
35-39	0	0	6	6	6	4
40-44	10	20	18	19	28	19
45-49	6	12	22	23	28	19
50-54	10	20	21	22	31	21
55-59	19	37	16	16	35	23
60-64	7	13	12	12	19	13
Total	**52**	**100%**	**97**	**100%**	**149**	**100%**

Service within the Electricity Industry is pensionable and managers could retire with

their pension with 40 years service. This was possible when people joined the

industry from school and undertook their training or further education while employed

within the ESI. In addition, managers and top managers frequently retired at the age

of 60, which also had the effect of triggering management succession. At least one

third (36%) of respondents were close to retirement: 23 per cent were aged 55-59 and

13 per cent were 60-64 years old.

SECONDARY SCHOOL EDUCATION

Question 7 *Which of the following categories describes your last school?*

This question asked respondents to select, from a pre-defined list, the type of school

they had attended. It can be seen from Table 13 that the majority had a grammar

school education (72%) and few went to a public school (6%).

Table 13

Secondary School Education - Type of School

Type of School	Top Managers		Managers		All Managers	
	No.	%	No.	%	No.	%
Grammar .	41	79	66	68	107	72
Secondary/Secondary Modern	4	8	12	12	16	11
Public School	3	6	6	6	9	6
Direct Grant School	0	0	4	4	4	3
Technical School	0	0	4	4	4	3
Comprehensive	1	2	2	2	3	2
Private fee paying	1	2	1	1	2	1
6th Form College	0	0	0	0	0	0
Not Stated	2	4	2	2	4	3
Total	**52**	**100%**	**97**	**100%**	**149**	**100%**

Among the two groups of respondents, over three-quarters (79%) of top managers and almost two-thirds (68%) of managers had been to Grammar School. Few top managers were educated in the private sector which places the majority of them in the category of 'players' rather than 'gentlemen'[9], and their potential successors in a similar category. However, it is clear that while these managers did not benefit from changes in the education system, they took advantage of the opportunities after leaving school by joining the Electricity Industry which offered them the opportunity of continuing their education and training, and access to promotion to higher positions.

FURTHER EDUCATION

Question 8   *Did you complete a course of Further Education?*

Respondents were asked if they had completed a course of further education. From their replies, four categories of activity emerge that describe their activities after they left school. These were:

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[9] D. Coleman (1973), 'Gentlemen and Players', *Economic History Review* 26(1), 92.

1. Left school and commenced further education. (37%)

2. Left school and commenced employment. (11%)

3. Left school and commenced further education and employment. (39%)

4. None of these - the majority of these respondents had gaps between the various dates with no reason or details given. (11%)

It can be seen from Table 14 that the majority of respondents (75%) pursued two main activities after leaving school and there is little difference between the two groups.

Table 14

Main activities followed after leaving school

Type of Activity	Top Managers		Managers		Total	
	No.	%	No.	%	No.	%
Further Ed. & Employment	20	38	38	39	58	39
Further Education	19	37	35	36	54	37
Employment	6	12	11	11	17	11
None of these	5	10	11	11	16	11
No information	2	4	2	2	4	3
Total	**52**	**100%**	**97**	**100%**	**149**	**100%**

Type of educational institution attended

Respondents had also been asked to select, from predefined lists, the type of education institution that they had attended and the type of course they had undertaken.

Some respondents had attended more than one of the institutions listed. It can be seen from Table 15 that similar proportions of top managers (50%) and managers (47%) attended university. While technical colleges were attended by a marginally higher proportion of managers (38%) than top managers (33%). Polytechnics, too, were attended by more managers (27%) than top managers (17%).

Table 15

Type of further education institution attended by respondents

Type of institution		Institutions attended				
		Top managers		Managers		Combined Total
		No.	%	No.	%	No.	%
University		26	50	46	47	72	48
Technical College		17	33	37	38	54	36
Polytechnic		9	17	26	27	35	23
College of Further Education only		1	2	2	2	3	2
Other Institutions ①		3	6	14	14	17	11
None		2	4	4	4	6	4
Total respondents	**(No.)**	**52**		**97**		**149**	

Notes:- Percentage columns do not sum to 100% due to attendance at more than one institution.
① Other Institutions: Correspondence Course 6; Open University 3; Business School 2; Other 6 (not stated).

Around one in five respondents (21%) attended more than one institution, including eight top managers (15%) and a quarter of managers (24%).

Type of course completed

It can be seen from Table 16 that of the 175 courses listed by respondents, most respondents (58%) had studied engineering.

Table 16

Type of course undertaken by Respondents

Type of Course	Top Managers		Managers		Combined Totals	
	No.	%	No.	%	No.	%
Engineering	30	58	57	59	87	58
Science	5	10	9	9	14	9
Business Studies	6	12	8	8	14	9
Arts ①	5	10	5	5	10	7
Law	5	10	3	3	8	5
Accountancy	4	8	7	7	11	7
Economics	4	8	4	4	8	5
DMS	1	2	7	7	8	5
Personnel	1	2	3	3	4	3
Other ②	2	4	9	9	11	7
Total courses attended	**63**	**36%**	**112**	**64%**	**175**	**100%**
Not Stated/None	1	2%	5	5%	6	4%
Total respondents	52	35%	97	65%	149	100%

Notes: The percentage columns sum to over 100% because the individual totals were calculated on the numbers attending each type of course. The results show that some managers attended more than one course. ① Arts, English, History, Modern Languages. ② Journalism, Company Secretary, Marketing, Social Sciences, Research, Statistics, Mathematics, Technology, Electronics,

EARLY TRAINING

Question 9 *State type of training (eg apprentice/graduate/admin/management trainee; employer and dates*

It can be seen from Table 17 that over half of all respondents (54%) had undertaken technical training. For one in eight the training was of a non-technical nature (13%); some respondents who had been trained did not specify the type of training (15%); one in ten (11%) volunteered they had not been trained; and a few (7%) did not say whether they had been trained or not.

Table 17

First Training undertaken by Top and other Managers

Type of Training	Top Managers		Managers		Combined Totals	
	No.	%	No.	%	No.	%
Technical						
Graduate Engineer	0	0	3	3	3	2
Graduate Apprentice	4	8	5	5	9	6
Student Apprentice	10	19	14	14	24	16
Apprentice Electrical Fitter	2	4	2	2	4	3
Engineering Apprentice	2	4	1	1	3	2
Craft Apprentice	0	0	6	6	6	4
Other Apprenticeships	7	13	16	16	23	15
Other Training	1	2	8	8	9	6
Sub-total	26	50	55	57	81	54
Non-Technical						
Articled Clerk	3	6	2	2	5	3
Administrative Trainee	2	4	2	2	4	3
Management Trainee	2	4	1	1	3	2
Accountancy Trainee	1	2	1	1	2	1
Accountancy Graduate	1	2	0	0	1	1
Clerical Trainee	1	2	0	0	1	1
Computer/Marketing/Secretarial	0	0	3	3	3	2
Sub-total	10	19	9	9	19	13
Unspecified Training						
Graduate Trainee	6	12	9	9	15	10
Trainee	0	0	1	1	1	1
Other Training ① ②	4	8	3	3	7	5
Sub-total	10	19	13	13	23	15
"None" [volunteered]	2	4	14	14	16	11
None stated	4	8	6	6	10	7
Total	**52**	**100%**	**97**	**100%**	**149**	**100%**

Notes: ① Top Managers: Junior NCO, RAF, then computer trainee ICL; Post Graduate Apprentice deHavilland; Journalism - indentured. ② Managers: Computer and information systems; Journalism; Day release - Business Studies.

Training Provider

Technical Training

It can be seen from Table 18 that of the respondents who were technically trained (66%), three in five (60%) were trained outside the ESI.

Non-Technical Training

Non-technical training, such as taking articles with solicitors or accountants, was taken up outside the ESI by fifteen (75%) of the top manager respondents. Managers (55%) were more likely to be trained from within the ESI.

Table 18

ESI and non-ESI training

	TM		Mgr.		Total	
	No.	%	No.	%	No.	%
Technical						
ESI	11	42	21	30	32	40
Non-ESI	15	58	34	62	49	60
Sub total	26	21	55	45	81	66
Non-Technical						
ESI	5	25	12	55	17	40
Non-ESI	15	75	10	45	25	60
Sub total	20	16	22	18	42	34
Total	46	37%	77	63%	123	100%
No information					26	

Length of training

It can be seen from Table 19 that the average period of technical training provided by the ESI was longer than the technical training experienced by those in non-ESI schemes. ESI technical training lasted over 5 years compared with 3.5 years when trained outside the ESI. Top managers trained in the ESI received the longest training whether it was technical or non-technical training.

Table 19

Average length of training undertaken by respondents

Type of Training	ESI Average period (years)	No.	Non-ESI Average period (years)	No.	Total No.
Technical					
TM	5.55	11	3.35	15	26
Managers	4.91	21	3.70	34	55
Sub-total	**5.23**	**32**	**3.53**	**49**	**81**
Non-Technical					
TM	2.40	5	2.26	15	20
Managers	2.27	12	2.10	10	22
Sub-total	**2.34**	**17**	**2.18**	**25**	**42**

EMPLOYMENT IN ESI

Question 10. *Posts in ESI*

This question sought details of posts held in the ESI, and asked respondents to give details of their job titles, grades, employing organisations and dates.

Table 20 shows the approximate age at which respondents joined the ESI.[10] It can be seen from the table that one in six (17%) of respondents had joined the ESI before the age of twenty and almost a half (46%) had joined before the age of 25 years.

Table 20

Approximate Age at joining ESI

Age Group	Top Managers No.	%	Managers No.	%	Combined Results No.	%
15-19	7	13	18	19	25	17
20-24	17	33	26	27	43	29
25-29	6	12	25	26	31	21
30-34	6	12	16	16	22	15
35-39	7	13	8	8	15	10
40-44	5	10	2	2	7	5
45-49	1	2	0	0	1	1
50-54	2	4	1	1	3	2
55-59	1	2	1	1	2	1
Total	**52**	**100%**	**97**	**100%**	**149**	**100%**

Notes: Not all respondents joined the ESI direct from school or further education, some went via other employment and joined at a later date. Some began employment as war commenced.

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[10] Calculated by deducting the length of service from each respondent's age group.

This question also sought to identify the number of times that managers had changed

employers. In order to provide comparisons of mobility, respondents employed by

the CEGB were classified as moving employers when they moved within the CEGB

to another Region or Division.

Table 21 analyses the number of different Boards respondents passed through during

their careers. The results show that top managers were more mobile than managers.

Almost two-thirds of manager respondents (63%) had experience in only one

electricity organisation compared with two in five top manager respondents (40%).

More top manager respondents (17%) than manager respondents (5%) had worked in

three different companies. Some top manager respondents had worked in more than

three companies (14%), none of the other manager respondents had done so.

Table 21

Experience in other Boards
Number of different Boards passed through during career

Number of different Boards	Top Managers		Managers	
	No.	%	No.	%
1	21	40	61	63
2	15	29	31	32
3	9	17	5	5
4	2	4	0	0
5	3	6	0	0
6	2	4	0	0
Total	**52**	**100%**	**97**	**100%**

Note: Boards that respondents returned to after a period working in another board were excluded to avoid double counting the same board.

It can be seen from Table 22 that over half the top managers (54%) and almost two-

thirds of managers (62%) had changed posts between five and eight times. This is not

a great deal if one allows say 3 years per post but of course each step advanced up the

managerial hierarchy meant there were fewer posts available which became more sought after and difficult to obtain.

Table 22

Minimum number of posts held in the ESI

Number of Posts	Top Managers		Managers		Combined Results	
	No.	%	No.	%	No.	%
1	7	13	2	2	9	6
2	1	2	6	6	7	5
3	2	4	4	4	6	4
4	3	6	9	9	12	8
5	7	13	17	18	24	16
6	7	13	17	18	24	16
7	8	15	14	14	22	15
8	7	13	12	12	19	13
9	4	8	7	7	11	7
10	2	4	3	3	5	3
11+	3	6	2	2	5	3
Not stated	1	2	4	4	5	3
Total	**52**	**100**	**97**	**100**	**149**	**100**

Boards passed through on career route (top managers)

Some of the Area Electricity Boards emerged as employers of top manager respondents more than other area boards. On average, this group of respondents passed through boards six times. Thus, it can be seen from Table 23 that SEEB, SEB, MEB, EEB and NORWEB were above average for the number of top manager respondents who passed through them. While NEEB, SWaEB, Manweb and YEB were below average for employing the mobile group of respondents. This may mean that these respondents were more attracted to certain boards. The boards themselves may have attracted managers as springboards in their careers. There could have been a number of reasons: top management, culture, geographical, business success philosophical, networking etc, or perhaps there were fewer vacancies in some boards than in others.

Table 23

Area Boards passed through during career

	No.
SEEB	8
SEB	8
MEB	8
EEB	8
NORWEB	7
SWEB	6
LEB	6
EMEB	6
YEB	4
Manweb	4
SWaEB	3
NEEB	3
Total	71
Average	6

CAREER DEVELOPMENT

This section sought answers to questions concerning the ways in which the Electricity Industry managers had been developed during their careers. Respondents were asked questions about the type of courses they had attended; they were asked to rate the usefulness of the methods of learning they had experienced, and also to rate the usefulness of different types of career development. It was anticipated that the managers might not have developed certain skills, or tools, that may have been useful to them in their careers and they were asked, in retrospect, to select from a list and to rate those skills that would have been useful in their careers. Finally, they were asked to give reasons for not developing those skills.

Question 11. *Courses attended during employment in the ESI: ESI, external and self-development.* *[give course titles or nearest recollection, length of course in weeks, months, or years; date of course. State type of course, ie ESI internal, ESI external, ESI overseas, self-development.]*

Almost eight in ten (79%) respondents had attended management courses: three-quarters (75%) of top managers and eight in ten (80%) manager respondents, as well as many other courses. Over half (55%) the courses attended were held at the Electricity Industry's own training venues such as Horsley Towers, Buxton and Bricketwood or at an Area Board training centre. Top manager respondents (63%) were more likely to have attended the courses held at external organisations rather than courses organised and held at ESI training venues (37%), unless they attended as course directors or speakers. Conversely, managers (60%) were more likely to have attended the courses held internally at the industry's own training centres, where they could fraternise with colleagues, peers and senior managers. Just four in ten manager respondents had attended external courses which enabled them to associate with people of equivalent status from other industries and business organisations. Some managers said that the courses they had attended during their careers in the ESI were too numerous and too varied to mention. The length of time that respondents were released from their posts to attend courses varied from days to months. It can be seen from Table 24 that the majority (82%) of courses, lasted for three weeks (29%), two weeks (14%), or one week (29%).

Table 24

Duration of courses attended

Duration (weeks)	No.	%
Less than 1	33	10
1	98	29
2	45	14
3	96	29
4	26	8
5-6	10	3
8-9	2	1
10-12	23	7

Courses lasting for four weeks or more were usually held by organisations operating outside the Electricity Industry, such as the Administrative Staff College at Henley, Ashridge, the London and Manchester Business Schools. Some three-week courses were also held at those external establishments. The British Institute of Management, Civil Service College, Civil Defence College, Oxford, Durham and Cambridge Universities, NCB and Roffy Park, all provided courses nominated by some of the respondents.

The type of management courses nominated by respondents, analysed in Table 25, ranged from the general 'management' to more specific 'introduction to management', 'middle management', 'senior management' and 'executive development' through to 'leadership'. One-third of respondents had been on management courses (32%) and one in five had attended senior management courses (18%).

Table 25

Management Courses Attended by Respondents

Management Courses	TM		Mgr.		Total	
	No.	%	No.	%	No.	%
Management	21	28	49	35	70	32
Senior Management	11	15	27	19	38	18
Administrative Staff College, Henley	13	17	7	5	20	9
Executive Development	5	7	14	10	19	9
Ashridge Management College	7	9	8	6	15	7
Middle Management	3	4	13	9	16	7
Diploma in Management Studies	3	4	9	6	12	6
Introduction to Management/Junior Mgt	2	1	8	6	10	5
Leadership	3	4	4	3	7	3
London Business School	4	5	1	1	5	2
Manchester Business School	3	4	1	1	4	2
Total	75	35%	141	65%	216	100%
Total respondents attending mgt. courses	39	75%	78	80%	117	79%
Total respondents	52		97		149	

Methods of learning found most useful by respondents

Question 12   *Methods of learning that you have found most useful.*

The purpose of Question 12 was to discover what respondents thought about the educational techniques they had encountered during their career development. Respondents were presented with a list of methods of learning that they were asked to rate on a scale of usefulness. The findings are analysed in Table 26 using both percentages and mean scores. In order to identify the extent to which managers felt these methods were useful or not, percentage scores were calculated for 'most/fairly useful' and 'not very/not at all useful'. The difference between these two scores is shown as the 'net useful' percentage score.

The three most useful systems of study for these respondents were by personal study, in the form of reading (59%), followed closely by group discussions (58%) and by third party direction in the form of lectures (47%). · Examined courses were

considered useful by a similar proportion (47%) but some one in six (17%) opposed this method and reduced the score to a net usefulness of thirty per cent.

Negative usefulness scores were calculated for hypothetical case studies (minus 21 percentage points), business management games (minus 9 percentage points), programmed instruction (minus 9 percentage points) and TV/video films about business (minus three percentage points).

Table 26

Learning Methods found to be the Most/Fairly Useful

Rank	Methods of Learning	Most/ Fairly useful %	Not very/ Not at all useful %	Net useful-ness ± %	TM mean score	Mgr mean score	All mean score
1	Reading	59	8	51	3.82	3.73	3.76
2	Discussion Groups/syndicates/seminars	58	14	44	3.77	3.68	3.71
3	Lectures	47	8	39	3.54	3.66	3.62
3	Examined Courses	47	17	30	3.68	3.46	3.53
5	Case Study (to be solved by you)	43	18	25	3.18	3.46	3.37
6	Case Study (to be solved by team)	40	29	11	3.27	3.38	3.34
7	Case Study (historical)	35	21	14	3.10	3.23	3.19
8	Role Playing	34	33	1	2.76	3.12	3.02
9	ESI Video Films (of you communicating)	30	20	10	3.06	3.12	3.10
10	TV/Video Films (about business)	26	29	-3	3.00	2.98	2.98
11	Business Management Games	24	33	-9	2.87	2.75	2.79
12	Programmed Instruction	19	28	-9	2.91	2.71	2.77
13	Case Study (hypothetical)	16	37	-21	2.55	2.73	2.67

Notes: The net usefulness score is the difference between the score for *most/fairly useful* and the score for *not very/not at all useful*. The scores are arranged in descending order on the last column.

By using mean scores it is possible to reveal differences between the perceptions of the two groups of respondents. For example, top managers supported the first three techniques (reading, discussion groups and examined courses) more than managers. On the other hand, manager respondents were more supportive than top manager respondents of lectures, case studies and role-playing.

Question 13. *Type of career development that you have found most useful.*

From a pre-determined list of ways of gaining knowledge and experience, respondents were asked to rate[11] each type of development according to its usefulness to them personally. The results presented in Table 27, show the 'net usefulness'[12] of each method of career development and mean scores.

The respondents perceived that three types of career development were more effective than the rest. These were by working at a new job gained through promotion (88%), learning on the job (85%) and by handling a project in their own board (79%). Six in ten (61%) considered that writing or speaking merited consideration followed by attendance on external courses (54%). There was though some ambivalence regarding the ESI's own courses, with just one third (32%) in favour and one third (31%) opposed to them. More contentious and resulting in a negative score (minus ten percentage points) was feedback through appraisal. A quarter (24%) thought this was effective but one-third (34%) were opposed to this method.

The differences between the perceptions of manager and top manager respondents are clear on all of the methods listed. Top manager respondents clearly valued the majority of these methods more than manager respondents. There were marginal differences between respondents in their perceptions of the usefulness of 'learning through a new job', 'handling a project in their own board' or 'learning on the job', but

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[11] The rating scale is defined in the Methodology.
[12] Ibid.

top managers valued methods that made them more mobile or brought them before a wider audience. The top managers, who were at the peak of their careers, more than managers, thought that 'secondments', 'attendance at external courses' and 'handling a project in another board' were of value to them in their career development. They were thus likely to believe that these methods of benefit when considering the career development of their own managers.

'Feedback through appraisal' produced a low 24 per cent rating of usefulness with one in three (34%) disagreeing, a quarter opted for the middle ground with an average rating, and one in five (18%) did not reply. However, if we look ahead to motivating managers, Question 17, feedback was considered important by seven in ten (69%) respondents.

Table 27

Type of career development found to be useful

	Very/ Fairly Useful %	Not Useful %	Net useful-ness ± %	TM mean score	Mgrs. mean score	All mean score
New job through promotion	88	1	87	4.68	4.69	4.68
Handling a project in own board	79	2	77	4.50	4.43	4.45
Learning on the job	85	1	84	4.40	4.43	4.42
Secondment within ESI	39	9	30	4.22	3.49	3.70
Attendance at external courses	54	7	47	4.11	3.64	3.79
Writing and/or speaking	61	8	53	3.83	3.67	3.72
Secondment outside ESI	14	7	7	3.83	3.00	3.26
Handling project in other board	13	8	5	3.83	2.96	3.25
Attendance at ESI courses	32	31	1	3.17	3.14	3.15
Feedback through appraisal	24	34	-10	3.11	2.60	2.76

Notes: Percentages calculated from 45 top managers, 94 managers, and the combined total of 139 respondents. Figures are arranged in descending order on the TM column.

Question 14(a)   *Which of the following skills would you have liked to develop that would have been useful to you in your career in the ESI?*

This question was retrospective. Managers were asked to look back on their careers and to rate,[13] from a list of pre-defined list, which skills they would have liked to develop that would now, in retrospect, have been most useful to them in their careers. Table 28 analyses the responses by percentages, mean scores and by the response rates. The analysis shows that there is a clear distinction between the two groups of respondents on business related and people skills.

The most important skill that respondents, in retrospect, said would have been useful in their careers, was 'finance and accounting' mentioned by almost two-thirds (63%) of respondents. Top manager respondents (mean score of 4.61) were more likely to say this than manager respondents (mean score 4.03). Three-quarters (75%) of top managers thought it would have been useful to have developed finance and accounting (63% most useful) for their ESI careers, compared with fifty-seven per cent of managers (29% most useful).

Under half (47%) of those responding ranked 'developing staff' in second position of importance as a skill that they should have learnt. Manager respondents (mean score 4.00) thought this more than top manager respondents (3.74). Working with staff, managing them and understanding how to get the best out of them would have been of crucial importance during their careers.

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[13] Ibid.

Skills that were not considered to be very useful and produced negative net usefulness scores were 'stock market knowledge' (minus eleven percentage points), 'law' (minus 12 points), 'marketing' (minus seven points) and 'macro economics' (minus 12 points). A third of top manager respondents thought they lacked 'stock market' skills (37%, compared with 14% managers); and 'corporate strategy' expertise (49%, compared with 35% managers). It may be that top managers were more influenced in their answers by the forthcoming privatisation. It can be seen from the table that for each of the mean scores, top managers were more likely to favour these skills as worthwhile than managers. Although, it may be that managers had already developed these skills.

Table 28

Skills that would have been useful in respondents' careers

	Most/ Fairly useful %	Not useful %	Net useful- ness ± %	Mean scores			Response rate	
				TM	Mgr.	All	TM %	Mgr. %
Finance and Accounting	63	5	58	4.61	4.03	4.22	63	70
Developing Staff	47	2	45	3.74	4.00	3.92	52	66
Industrial Relations	39	10	29	3.71	3.67	3.69	60	60
Corporate Strategy	40	10	30	3.68	3.47	3.53	54	64
Business Analysis	30	13	17	3.52	3.25	3.33	52	63
Marketing	22	29	-7	3.45	2.58	2.86	60	66
Business Studies	32	14	18	3.43	3.35	3.38	58	64
Computer Skills	40	14	26	3.42	3.50	3.47	60	70
Human Relations	36	11	25	3.32	3.69	3.57	54	61
Economics - Industrial	25	20	5	3.30	2.90	3.03	58	62
Stock market knowledge	21	32	-11	3.26	2.52	2.78	67	66
Economics - macro	15	27	-12	3.24	2.47	2.72	56	60
Statistics	22	19	3	3.21	2.93	3.02	54	60
Law	22	31	-9	3.21	2.62	2.82	65	65

Question 14 (b)   *'Reasons for not developing these skills'*

Respondents were also asked to give reasons for not developing the skills. The main reasons appeared to be that they had been partially but not fully developed (25 respondents); there was not enough time (17); lack of opportunity (11); there were

other competing priorities (7); these were not relevant at the time (5) or other people had the skills to make use of (3 respondents).

WRITERS AND THEORISTS

The previous section sought answers to questions about career development in the ESI. In this section the questions sought to identify whether the respondents had been influenced during their careers by a particular book or an author. Leading on from that question, they were asked if any theories or theorists had influenced them.

Question 15. *Have you been influenced by a specific book or books during your career?*

Over a third (36%) of respondents (half the top managers and 29% of managers) said they had been influenced by a writer/book. The majority (64%) either said they had not been influenced (60%), or did not reply (4%). The authors, or books, mentioned as being influential are analysed into four categories in Table 29. In the first category, Established Management, the management guru Peter Drucker was referred to by 14 respondents. The second category is headed Textbooks. While they could not recall particular titles or authors, some 13 of those responding said, somewhat vaguely, that they had been influenced by numerous technical publications. The third category for Topical/Recent publications included some management books that had been widely publicised around the time this survey was conducted. 'In Search of Excellence' was mentioned by 12 respondents, 'Making it Happen' was recalled by four respondents. In the final category, Classical, four respondents mentioned the Bible, but one remarked 'not for theological reasons'.

None of the managers mentioned the classical management theorists such as people like Fayol or Mary Parker Follett. In addition, around the time of the survey, the Handy/McCormack works on management education had been published and the findings had been publicised widely in the media but there was no reference to these topical works. However, the question was broad and the answers were wide ranging, with references to the Bible, Karl Marx, Richard Nixon and Galbraith to Tolstoy and Austen (specifically 'Pride and Prejudice').

Table 29

Writers and Theorists

Type of book	Title	Author	Respondents (No.)
Established Management	Various management books	Drucker	12
	Practice of Management	Drucker	2
	Up the Organisation	Townsend	3
Textbooks	Numerous technical publications	Not stated	13
	Facts from Figures	M J Moroney	2
	Business Strategy/Corporate Strategy	H. Igor Ansoff	2
	Books on economics	Not stated	2
	Various management books	Not stated	2
	Books on history	Not stated	2
Topical/Recent	In Search of Excellence	Tom Peters/Peters & Waterman	12
	Making it Happen	Sir John Harvey Jones	4
	One Minute Manager	Not stated	3
	Passion for Excellence	Tom Peters	2
	Management Today articles	Robert Heller	2
	Back from the Brink	Michael Edwardes	2
	The Naked Manager	Robert Heller	1
Classical	The Bible (*"but not for theological reasons"*)		4

Question 16. *Have you been influenced by any theories or theorists during your career?*

Two thirds of all respondents (66%) said they had not been influenced and 4% did not reply. Almost four in ten top managers (37%) responded, and over a quarter of managers (27%). Theories mentioned more than once as having been influential were

mainly concerned with the management of people, while others concerned business management, described below. The results are analysed in Table 30

Table 30

Influence of Theories or Theorists during Career

Theory/Book	Theorist	Managers No.	Top Mgrs No.	All No.
X & Y	Macgregor	4	0	4
None stated	Drucker	4	0	4
Management by Objectives	Not stated	4	0	4
In Search of Excellence	Tom Peters	1	2	3
Action centered Leadership	Adair	3	0	3
Human Relations/Human Behaviour	Not stated	3	0	3
"Work expands to fill the time available"	Parkinson	2	0	2
TQM - ["if it is a theory"]	Not stated	0	2	2
Group behaviour within an organisation	Not stated			

MOTIVATING MANAGERS

So far managers had been asked about their career development, the usefulness of the courses they had attended and whether any well-known writers or theorists had influenced them. The next section was concerned with what actually motivated managers, their mobility during their careers and whether they had achieved their career goals.

Question 17. *How would you rate the following in terms of importance for* [TM: *motivating your managers?*] [Mgr: *managers such as yourself?*] *Include those which may not be available now but could be with privatisation.*

Respondents were given a predefined list of motivating factors and asked to rate them on a scale[14] from one to five. The question wording varied slightly for each group of respondents. Top managers were asked to rate the items listed objectively in terms of importance for motivating their own managers. Managers were asked to consider the

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[14] Ibid.

importance of the motivating factors subjectively. Thus, the results to these slightly different questions would show whether top managers' perceptions of what they thought motivated their own managers were equal to the motivators that respondent managers said would, in fact, inspire and reward them for their efforts.

The list contained certain motivators which, at the time of asking the questions, were not available to managers employed in the nationalised industry, but were likely to be available to them with privatisation. For example, performance pay, bonuses, company car or health insurance. Certain motivators were concerned with tangible financial individual rewards while others focused on factors that might be removed with privatisation, such as security of tenure, pension, and a clear career path. The importance of individual management responsibility and authority embraced the right to manage, more freedom of action, more responsibility, fewer reporting procedures and freedom from union-employer agreements. Factors that relied on other people included recognition for work well done, feedback and the importance of having able superiors. The results are analysed in Table 31 below.

Most/fairly important motivators

More than eight in ten respondents considered that the most important motivator was 'recognition for work well done' (85%). Rated as being equally important, in joint second place, by eight in ten respondents (81%) were 'able superiors' and the need for 'more freedom of action'. Other important factors that influenced motivation were also connected with the ways in which they impinged on the manager's job. Three-quarters specified 'the right to manage' (78%), 'more responsibility' (76%) and

'performance pay and rewards' (75%). Ranked in seventh place as an important

motivator, was 'feedback' (69%)

Table 31

Motivating managers - important motivators

Motivator	Importance			Mean scores			Response rates	
	Most/ Fairly	Not at all/Not very	Net impor- tance	TM	Mgr.	All	TM	Mgrs.
	%	%	± %				%	%
Recognition for work well done	85	2	83	4.41	4.34	4.36	85	100
Able superiors	81	2	79	4.09	4.36	4.28	83	99
Right to manage	78	4	74	4.23	4.17	4.19	83	97
Performance pay and rewards	75	2	73	4.33	4.11	4.18	83	100
More freedom of action	81	5	76	4.16	4.11	4.12	83	98
More responsibility	76	2	74	4.21	4.02	4.08	83	97
Feedback	69	7	62	3.81	3.99	3.93	83	98
Respect	55	11	44	3.62	3.67	3.65	81	97
Bonuses	48	14	34	3.72	3.45	3.54	93	94
Pension	49	15	34	3.37	3.60	3.53	83	97
Salary differentials	48	20	28	3.26	3.46	3.40	81	98
Fewer reporting procedures	46	19	27	3.53	3.32	3.38	83	98
Planned personal development	47	12	35	3.26	3.32	3.30	83	96
Fringe benefits, Co. car, health ins.	46	16	30	3.43	3.14	3.24	81	86
Clear career path	41	28	13	3.23	3.11	3.15	85	95
Security	32	26	6	2.83	3.20	3.09	79	98
Status	33	23	10	3.31	2.95	3.06	81	99
Prestige	27	29	-2	3.26	2.80	2.94	81	98
Freedom from union-employer agreements	25	42	-17	2.93	2.62	2.72	81	98
Annual increments	14	39	-25	2.33	2.49	2.44	81	97

Note: The scores are arranged in descending order on the mean score column for All respondents.

Misperceptions between Top Managers and Managers

There were differences in the scores for both groups of respondents, which are

illustrated by using mean scores. Top manager respondents were more likely to say

that managers were motivated by 'recognition for work well done' (mean score 4.41),

than manager respondents themselves (mean score 4.34). While manager respondents

thought 'able superiors' (mean score 4.36) were more important than top managers

(mean score 4.09).

The Money Motivator

It can be seen from Table 31 that top manager respondents thought their managers were more likely to be motivated by 'performance pay and rewards' (mean score 4.33), 'bonuses' (3.72), and 'fringe benefits etc' (3.43). However, manager respondents were less supportive of these motivators (mean scores 4.11, 3.45 and 3.14, respectively). Top managers placed less importance on 'pensions' (3.37) and 'salary differentials' (3.26) than manager respondents (3.6 and 3.46, respectively).

The wording of the next question varied slightly to take account of the respondents status as either top managers or managers. Top managers were asked about positions they held before they reached chief officer level.

Question 18. *Before you reached* [TM: *'Chief Officer level'*; Managers: *'your present position'*] *what length of time do you think you ought to have spent in ESI posts?*

This question sought to investigate if managers were dissatisfied with the time they had spent in certain posts, they were asked to state the length of time that they should have spent in ESI posts before they reached their present position. Some managers did not achieve their preferred time in post because they moved on faster than they would have wished. Table 32 shows that for most respondents (64%) the preferred time to have spent in posts was three years (39%) or less (25%). Some respondents (35%) would have preferred periods in post of at least four years (14%) or more (21%).

Table 32

Preferred periods for posts

	1 Year	2Y	3Y	4Y	5Y	5+ years	Total posts
Number of posts	11	65	120	44	50	16	306
Percentage %	4	21	39	14	16	5	100%

Respondents were then asked if they had achieved their preferred time in the post(s) they had occupied. One-third (33%) said they had achieved their preferred time in post. Around a quarter (27%) said they had not achieved their preferred time in post, in this case, there were more manager (30%) than top manager (22%) respondents. The results are shown in Table 33.

Table 33

Whether achieved preferred time in post

		Top Managers %	Managers %	All %
Yes,	achieved	35	32	33
No,	not achieved	22	30	27
	Not stated	43	38	40
	Total	**100**	**100**	**100**

Reasons why people did not achieve their preferred time in post

Respondents who had not achieved their preferred time in post were then asked to give the reasons why things had not gone according to plan. The most frequently mentioned reason was the lack of opportunity. Respondents said they moved faster because of the opportunities that were available. There were, however, a number of reasons given by manager respondents for slow moves. Lack of opportunity was mentioned by 12, working in a specialised area (5), changing disciplines (3), lack of motivation (2), and no wish to move home (2). One respondent commented that managers were demotivated to apply for promotion because as engineers they could earn shift allowances and excess hours payments that gave them salaries that were

higher than those awarded to their senior managers. As a result of this, he thought

that managers who sought promotion were not always the best available.

POSTS OCCUPIED BY CHAIRMEN AND SENIOR EXECUTIVES

The next questions focus on top management posts and the length of time that these

positions should be occupied. Obviously, the more time they spent in their posts, the

less opportunities there were for management succession. Top managers and

managers were asked exactly the same question.

Question 19. *What do you think is the maximum length of time that Chairmen, Deputy Chairmen and other senior executives in the nationalised ESI, should normally remain in office?*

The largest proportion of respondents thought that three to five years was the

maximum period of office to be occupied by all chairmen and chief officers. Over one

third (36%) thought chairmen should be in office for 3-5 years. Relatively few

respondents thought a period of less than three years was appropriate.

There was a difference in opinion among top manager and manager respondents about

the length of time that chairmen should remain in post. Top managers thought that

chairmen should remain in office for longer terms while managers thought the reverse.

It can be seen from Table 34 that seven in ten (69%) top managers thought chairmen

should remain in post for either 6-9 years (38%) or for 10 years or more (31%).

Conversely, four in ten managers (43%) thought chairmen should remain in post for

five years or less. None thought they should remain in post for ten years.

Table 34

Length of time that chairmen should occupy posts

Time period	All respondents	Top Managers	Managers
	%	%	%
Less than 3 years	2	2	2
3 - 5 years	36	27	41
6 - 9 years	30	38	26
10+ years	11	31	0
No reply	21	2	31
Total	**100%**	**100%**	**100%**
	No.	No.	No.
No reply	31	1	30
Total respondents	118	51	67
All	149	52	97

In the case of deputy chairmen, it can be seen from Table 35 that both groups of respondents shared similar views. A half of them thought 3-5 years was the most suitable time for deputy chairmen to remain in office. If deputy chairmen were to remain in office for such a short period, they would either be promoted, retire, or move outside the industry. The former would be the most realistic in the majority of cases but top managers had already indicated that chairmen should remain in office for longer periods. This may be an implied criticism of the role of deputy chairmen in the Electricity Industry.

Table 35

Length of time that deputy chairmen should occupy posts

Time period	All respondents	Top Managers	Managers
	%	%	%
Less than 3 years	1	2	0
3 - 5 years	50	50	51
6 - 9 years	20	19	21
10+ years	8	6	9
No reply	21	23	20
Total	**100%**	**100%**	**100%**
	No.	No.	No.
No reply	31	12	19
Total responses	118	40	78
Total	149	52	97

Both groups of respondents considered 3-5 years was an adequate period for senior executives to remain in post. It can be seen from Table 36 that top manager respondents (44%) were more likely to think this than manager respondents (35%). Almost a third of managers (32%) thought 6-9 years was a suitable period, compared with a quarter of top managers (25%).

Table 36

Length of time that senior executives should occupy posts

Time period	All respondents	Top Managers	Managers
	%	%	%
Less than 3 years	1	2	1
3 - 5 years	38	44	35
6 - 9 years	30	25	32
10+ years	11	8	12
No reply	20	21	20
Total	**100%**	**100%**	**100%**
	No.	No.	No.
No reply	30	11	19
Total responses	119	41	78
Total respondents	149	52	97

The next question asked about the advantages and disadvantages of these senior people remaining in post for ten years of more.

Question 20. *What, if any, are the advantages and disadvantages of chairmen and chief officers remaining in their posts for ten years or more?*

Two thirds (64%) respondents thought there were advantages; whereas one in five (21%) did not think there were any advantages of the most senior people being in post for ten years or more. 'Continuity' was most frequently mentioned by 41 respondents. Eight in ten (79%) thought there were definite disadvantages of a ten year tenure. The principal disadvantages were considered to be staleness, mentioned by 29 respondents, and stagnation (20). The results are analysed in Table 37.

Table 37

**Advantages/Disadvantages of Chairmen & Other Senior Executives
remaining in office for ten years or more.**

Advantages	Respondents No.
Continuity	41
Experience	18
Stability	16
Knowledge of Business/ESI organisation	12
Opportunity to carry through long-term plans and see effects of their actions	7
Familiarity with ESI/organisation	5
Knows the staff/customers/MPs/customs & products/ business	5
Accountability	4
Responsibility for action – better decisions	3
Consistent direction (provided of course appointment is sound)	3
Disadvantages	
Staleness	29
Stagnation	20
Reduced motivation/enthusiasm/drive/initiative for change	17
Blocking of promotion	13
Lack of new initiatives	10
Challenge of change lost/resistance to change	10
Inertia/complacency	9
Demotivating effect on staff	8
Great damage if a poor performer	8
Lack of or reduced innovation	7
Cautious attitude/introspective	5
Lack of dynamism/drive	5
Narrow/blinkered view or focus	4
Preferential policies/Uni.-directional	4
Over familiarity	3

MANAGERIAL ACTIVITIES

Up to this point, respondents backgrounds had been explored, including their education, career development and progression; and the tenure of senior executives. The next set of questions asked managers and leaders about their roles and sought to identify the type of activities that occupied them during their time at work, and the importance of those activities in terms of perceived usefulness. The Electricity Industry was a federal bureaucracy that appeared to function through a highly organised and structured system of meetings and procedures. Respondents were

asked subsequently about the time they spent on different types of meetings and how useful it was to attend such meetings.

Question 21(a)   Allocation of your time at work *ie how much of your time is spent on any of these activities*

Respondents were asked to allocate their time against a predefined list of activities. The responses to this question shown in Table 38a are analysed by those who did not reply (7%). The zero column indicates that the activity was not undertaken. To simplify the results, the time spent on each activity is classified into groups of three hours, ie 1-3 hours, 4-6 hours etc. These groups were carefully selected to ensure than none of the original meaning was lost.

It can be seen from the results (Tables 38a, 38b, 38c) that most respondents spent an amount of time on all activities. Some activities encroached and used a far greater amount of their time than others. For example, activities that took at least ten hours a week included meetings (56%), writing/drafting (30%) and critical reading (24%).

Table 38a

Allocation of time at work - hours per week - All Respondents

		NR %	0 %	1-3 %	4-6 %	7-9 %	10+ %	Total %	Total No.	%
1	Telephone	7	5	37	41	5	5	88	149	100%
2	Computer	7	64	23	5	0	1	29	149	100%
3	Writing/drafting	7	6	15	33	9	30	87	149	100%
4	Reading: critical & immediate	7	5	19	32	13	24	89	149	100%
5	Reading: background	7	14	40	30	1	9	79	149	100%
6	Dictation	7	27	44	21	1	1	66	149	100%
7	Meetings	7	5	4	14	14	56	88	149	100%
8	Thinking	7	28	28	23	5	9	65	149	100%
9	Travelling	7	15	26	30	6	16	79	149	100%
10	Representational duties	7	30	30	23	5	5	63	149	100%
	Average time on all activities	**7%**	**20%**	**27%**	**25%**	**6%**	**16%**	**73%**	**1490**	**100%**

Note: Representational duties involved external meetings when the respondent represented their own organisation, eg meetings with Government, Local Authorities, manufacturers and suppliers etc.

Over half the respondents (52%) spent up to six hours a week, or one hour per day, on all of the activities listed, with the exception of the computer. The distribution of activities undertaken by top managers and managers alike was remarkably similar, except for 'writing/drafting' and 'meetings'.

Nine in ten (89%) respondents spent their time 'reading material that was critical and needed their immediate attention'. Managers (93%) were more likely to be doing this than top managers (71%). Though one in three top managers (29%) spent more than ten hours a week on this activity compared with one in five (22%) managers.

Almost nine in ten (88%) respondents rated using the 'telephone' and going to 'meetings' as recurrent activities. Over three-quarters of respondents used the telephone for up to six hours a week, managers (92%) used the phone more than top managers (81%). Conversely, attending meetings consumed more of the working week than the telephone. Almost six in ten (56%) spent over ten hours a week in meetings, top managers (75%) more than managers (45%).

'Writing or drafting' documents was frequently undertaken by 87 per cent of respondents. Over half of top managers (52%) said they spent up to six hours a week doing this while another fifth (21%) said they spent at least ten hours or more on this activity. Over a third (35%) of managers also spent longer periods drafting documents.

Eight in ten managers (79%) spent some time 'travelling' each week. Mostly the time spent for over half of them (56%) was six hours or less. Not surprisingly, a quarter (25%) of top managers spent longer periods travelling of ten hours a week or more, compared with one in ten (11%) managers.

Table 38b

Allocation of time at work - hours per week - top managers

	Top Managers	NR %	0 %	1-3 %	4-6 %	7-9 %	10+ %	Total %	Total No.	%
1	Telephone	15	4	37	38	6	0	81	52	100
2	Computer	15	60	21	4	0	0	25	52	100
3	Writing/drafting	15	6	17	35	6	21	79	52	100
4	Reading: critical & immediate	15	4	17	29	6	29	71	52	100
5	Reading: background	15	8	37	25	2	13	77	52	100
6	Dictation	15	13	48	21	2	0	71	52	100
7	Meetings	15	4	0	2	4	75	81	52	100
8	Thinking	15	35	17	25	2	6	50	52	100
9	Travelling	15	10	21	27	2	25	75	52	100
10	Representational duties *	15	25	25	23	2	10	60	52	100
	Average time on all activities	15%	17%	24%	23%	3%	18%	68%	520	100%

Table 38c - Allocation of your time at work - hours per week - managers

		NR %	0 %	1-3 %	4-6 %	7-9 %	10+ %	Total %	Total No.	%
1	Telephone	2	5	37	42	5	7	92	97	100
2	Computer	2	64	25	5	0	1	31	97	100
3	Writing/drafting	2	6	13	32	11	35	82	97	100
4	Reading: critical & immediate	2	5	21	33	18	22	93	97	100
5	Reading: background	2	14	41	32	1	6	80	97	100
6	Dictation	2	27	42	21	0	1	64	97	100
7	Meetings	2	5	6	21	20	45	92	97	100
8	Thinking	2	28	34	22	7	10	73	97	100
9	Travelling	2	15	29	32	8	11	80	97	100
10	Representational duties *	2	30	32	23	7	3	65	97	100
	Average time on all activities	2%	20%	28%	26%	8%	14%	76%	970	100%

Two thirds of manager respondents (64%) used 'dictation' facilities. Half (48%) of top manager respondents spent up to three hours a week giving dictation compared with a similar proportion (42%) of managers, and one in five (21%) from each group were involved with dictation for 4-6 hours a week.

'Thinking' things through was an active mental occupation for the majority of manager respondents who set aside time each week to do so while others said they did it all the time they were working. Over half of the manager respondents (56%) tended to spend up to six hours a week on this activity compared with fewer (42%) top manager respondents.

'Using the computer' was the least utilised activity. Almost two-thirds (64%) of respondents said they did not use it at all and a quarter (23%) said they used it for 1-3 hours a week. Writing/drafting, therefore, a key activity for eight in ten (79%) was not directly input to a computer. A quarter of top managers used the computer for up to six hours but none used it for any longer than that. Three in ten (30%) manager respondents used the computer for up to six hours, and just one per cent said they used it for ten hours or more.

Question 21 (b)   *Rating the allocation of your time at work.*

The former question asked respondents how much time they spent during the week on numerous activities. This question asked them to consider the usefulness of those same activities. Respondents were asked to place each activity on a scale[15] from 1 (least useful) to 5 (most useful) that described their perceived usefulness of each item. The results are analysed in Table 39.

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[15] Ibid.

Activities that were highly rated were the same as those on which the most time was spent. These were 'thinking' things through (86%), 'critical and immediate reading' (77%), 'using the telephone' (72%), and 'writing/drafting' (70%).

Another activity which managers allocated more time to was attending 'meetings', with over half (56%) stating that this took up more than ten hours a week. However, less than half (49%) rated this as a useful activity and managers were more likely to perceive meetings as being useful (mean score 3.68) than top managers (mean score 3.28). It should be noted that, at the time the survey was conducted, many of the top managers were sitting on various working parties due to the run up to privatisation, in addition to their normal work. Some chairmen and other senior executives were holding meetings in the evenings because of the additional work connected with privatisation.

Over two-thirds (67%) found 'travelling' to be the least useful way in which to spend time and many would have been using all forms of travel to take them to meetings within their boards, other boards, overseas and elsewhere.

'Other' activities most frequently volunteered by respondents, included meeting people, suppliers/staff/walking the job (7 respondents).

Table 39

Rating the allocation of your time at work

Activity	Most/ fairly useful %	Not very/ least useful %	Mean scores			Difference TM-Mgr. ± mean
			TM	**Mgr**	**All**	
Thinking	86	1	4.54	4.52	4.52	+0.02
Reading: critical and immediate	77	2	4.02	4.09	4.07	-0.05
Writing/drafting	70	4	3.85	4.10	4.02	-0.17
Telephone	72	4	4.03	4.02	4.02	+0.01
Meetings	49	11	3.28	3.68	3.56	-0.28
Dictation	42	19	3.55	3.32	3.40	+0.15
Reading: background	40	14	3.44	3.18	3.27	+0.17
Representational duties	27	28	3.00	3.16	3.11	-0.11
Computer	11	24	2.76	2.40	2.51	+0.25
Travelling	7	67	1.87	1.75	1.79	+0.08
Other	16	2	4.18	4.64	4.44	-0.26

Note: Figures are arranged in descending order on the mean score for All respondents.

Question 22a. MEETINGS. *On average, how many hours per week do you spend at meetings such as the following?*

This question established the type of meetings respondents attended and also gave more insight, as did the previous question, into the roles that these respondents undertook. Those respondents who commented that they did not have time to complete this question was classed along with others who did not respond, in the zero hours category.

Respondents were asked to state, from a pre-selected list of meetings, the hours per week they spent at meetings. In addition, they were asked to specify other meetings that they attended that were not included on the list. Four of the statements on the list were worded slightly differently to reflect the differences in the type of meetings that applied to top managers and managers. Top managers were asked about 'Board Meetings' and the equivalent for managers was 'Meetings with other managers'. Top

managers were asked about 'Executive meetings with Chief Officers'; Managers were

asked about 'Meetings with Chief Officers'. Top managers were asked about

'meetings with individual managers on specific problems'; managers were asked about

'meetings with individual staff on specific problems'. Finally, top managers were

asked about 'meetings with groups of managers on specific problems' while managers

were asked about 'meetings with staff on specific problems'. The findings are analysed

in three tables: Table 40a is for all respondents, Table 40b relates to top managers

and Table 40c is for manager respondents.

Table 40a

Type of meetings attended by all Respondents
Hours per week engaged in these meetings

All Respondents (149)			Hours per week				Participants Total	
	0	0	1-3	4-6	7-9	10+		
	No.	%	%	%	%	%	No.	%
In office (informal, ad hoc)	26	17	36	30	6	10	123	83
With individual [managers] staff on specific problems	47	32	44	19	3	2	102	68
[Board meetings]Meetings with other managers	56	38	55	6	1	1	93	62
With senior H.O. managers	64	43	47	7	1	1	85	57
With groups of [managers] staff on specific problems	65	44	44	10	1	2	84	56
[Executive] Meetings with Chief Officers	71	48	44	7	1	1	78	52
With outstationed managers	78	52	41	6	1	0	71	48
Internal on privatisation (in your organisation)	84	56	32	8	2	2	65	44
Formal meetings with trade unions	112	75	24	1	0	0	37	25
JCC/DJCC/NJCC	113	76	23	1	0	1	36	24
ESI national meetings with managers	115	77	22	1	0	0	34	23
Informal meetings with trade unions	117	79	18	1	1	1	32	21
External on privatisation (ESI only)	119	80	15	3	0	1	30	20
Lead meetings outside the ESI ①	122	82	14	3	0	1	27	18
Other privatisation meetings	124	83	15	1	0	1	25	17
Other meetings outside ESI ②	123	83	13	5	0	0	26	17

Notes: Variations in the wording of questions for top managers are enclosed in square brackets [].
① Meetings with outside bodies organised and led by respondent, eg with manufacturers, local government etc.
② Meetings attended because respondent is a member of another body but not the actual organiser.

Some eight in ten respondents (83%) said they frequently held 'informal ad hoc

meetings in their offices' and for two-thirds (66%) this consumed up to six hours of

their week. There was little difference in the results between top managers and managers. Ranked in second place were individual meetings (68%) followed by board/meetings with managers (62%), with senior HO managers (57%), groups of managers or staff (56%), executive/chief officer meetings (52%), out-stationed managers (48%) or meetings connected with privatisation (44%). However, apart from informal meetings in the office (69%), top manager respondents priorities were different from managers. They were more likely to hold meetings with chief officers (65%), and senior managers (60%) or individual managers (60%). Their priorities then focused on meetings relating to privatisation (58%), with groups of managers (54%) and board meetings (52%). Then they were likely to meet with out-stationed managers (46%). The tables for top managers and managers follow.

Table 40b

Type of meetings attended by top managers
Hours per week engaged in these meetings

Top Managers (52)			Hours per week					
	NR No.	0 %	1-3 %	4-6 %	7-9 %	10+ %	Total No.	%
In office (informal, ad hoc)	16	31	33	21	6	10	36	69
Executive meetings with Chief Officers	18	35	52	12	0	2	34	65
With senior H.O. managers	21	40	48	10	2	0	31	60
With individual managers on specific problems	21	40	42	13	2	2	31	60
Internal on privatisation (in your organisation)	22	42	35	15	4	4	30	58
With groups of managers on specific problems	24	46	40	12	0	2	28	54
Board meetings	25	48	52	0	0	0	27	52
With outstationed managers	28	54	37	10	0	0	24	46
ESI national meetings with managers	31	60	38	2	0	0	21	40
External on privatisation (ESI only)	33	63	27	6	0	4	19	37
JCC/DJCC/NJCC	36	69	31	0	0	0	16	31
Formal meetings with trade unions	36	69	31	0	0	0	16	31
Other privatisation meetings	36	69	29	2	0	0	16	31
Informal meetings with trade unions	39	75	21	0	2	2	13	25
Lead meetings outside the ESI	45	87	12	2	0	0	7	13
Other meetings outside ESI	46	88	8	4	0	0	6	12

The results for manager respondents show that they were involved in different types of meetings than their senior peers, especially those that involved solving problems. The majority of manager respondents held informal meetings (90%), followed by problem solving meetings with individuals (73%), meetings with other managers (68%) and problem solving with groups of managers (58%). Meetings with senior H.O. managers were ranked in fifth place (56%) and followed by those with out-stationed managers (48%), and chief officers (45%). Some manager respondents were also involved with internal meetings on privatisation (36%).

Table 40c

Type of meetings attended by managers
Hours per week engaged in these meetings

Managers (97)			Hours per week				Participants	
	NR	0	1-3	4-6	7-9	10+	Total	
	No.	%	%	%	%	%	No.	%
In office (informal, ad hoc)	10	10	38	35	6	10	87	90
With individual staff on specific problems	26	27	45	23	3	2	71	73
Meetings with other managers	31	32	57	9	1	1	66	68
With groups of staff on specific problems	41	42	45	9	1	2	56	58
With senior H.O. managers	43	44	46	6	1	2	54	56
With outstationed managers	50	52	43	4	1	0	47	48
Meetings with Chief Officers	53	55	39	5	1	0	44	45
Internal on privatisation (in your organisation)	62	64	30	4	1	1	35	36
Formal meetings with trade unions	76	78	21	1	0	0	21	22
JCC/DJCC/NJCC	77	79	19	1	0	1	20	21
Lead meetings outside the ESI	77	79	15	4	0	1	20	21
Other meetings outside ESI	77	79	15	5	0	0	20	21
Informal meetings with trade unions	78	80	16	2	0	1	19	20
ESI national meetings with managers	84	87	13	0	0	0	13	13
External on privatisation (ESI only)	86	89	9	2	0	0	11	11
Other privatisation meetings	88	91	7	1	0	1	9	9

Consultative meetings permeated the fabric of the ESI with a network of meetings held at national (NJCC), district (DJCC) and local (JCC) levels. Representation on the committees involved external bodies such as trade unions at national level, managers, employees and employee union representatives at local level. Three in ten

(31%) of top manager respondents were involved with meetings of the 'JCC/DJCC/NJCC' for less than four hours a week, and of the one in five (21%) manager respondents engaged in these meetings, most allocated 1-3 hours a week for these meetings. The proportions of top managers and managers who attended 'formal meetings with trade unions' were similar to those attending consultative meetings. A quarter of top managers (25%) said they attended 'informal meetings with trade unions' and one in five (21%) of top managers allocated not more than three hours a week to these meetings. Slightly fewer managers (20%) held informal meetings with trade unions, mostly taking 1-3 hours a week (16%).

Question 22(b)   RATING THE USEFULNESS OF MEETINGS

The previous question asked respondents about the amount of time that they spent at meetings, question 22(b) asked them to give their opinions about the usefulness of such meetings, using a scale[16] from one to five.

The most useful meetings were those informal, ad hoc meetings held in the office (83% thought these were 'very/fairly' useful and not one respondent thought they were a waste of time). Ranked in second place were 'meetings with individual managers/ individual staff on specific problems' (79%), followed by meetings with managers/groups of staff on specific problems (69%).

Top manager respondents found the internal (mean 4.14) and external (mean 4.08) meetings on privatisation useful along with meetings with their executive (mean 4.09).

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[16] Ibid.

Manager respondents, however, selected in fourth place external meetings at which they held a leading role for the ESI (mean 4.13), followed by other meetings outside the ESI (mean 4.09). Meetings with other managers secured sixth place (mean 4.03).

The least useful meetings were perceived to be 'ESI national meetings with managers' (17%), 'coordination machinery' (26%). 'Informal meetings with trade unions' fared better and were seen as useful by one in three respondents (34%), and compare with the usefulness of 'formal meetings with trade unions' (20%).

Table 41

Usefulness of meetings

	Very/ fairly useful %	Not very/least useful %	All mean	TM mean	Mgr. mean
In office (informal), ad hoc	83	0	4.41	4.45	4.39
With individual [managers]/ staff on specific problems	79	2	4.43	4.36	4.46
With groups of [managers]/ staff on specific problems	69	1	4.29	4.31	4.27
Internal on privatisation (in your organisation)	38	8	3.78	4.14	3.55
[Executive]/Meetings with Chief Officers	57	6	4.03	4.09	4.00
External on privatisation (ESI only)	21	2	3.88	4.08	3.64
With outstationed managers	49	2	3.96	3.94	3.96
With senior HO managers	54	6	3.88	3.87	3.89
Other privatisation meetings	19	1	3.75	3.87	3.59
[Board Meetings]/Meetings with other managers	59	6	3.95	3.77	4.03
Lead meetings outside ESI	18	1	4.03	3.75	4.13
Informal meetings with trade unions	34	11	3.66	3.57	3.71
Other meetings outside ESI	12	1	3.84	3.13	4.09
ESI national meetings with managers	9	17	2.76	2.82	2.68
Formal meetings with trade unions	20	12	2.70	2.38	2.95
Coordination JCC/DJCC/NJCC	9	26	2.32	2.24	2.39

Note: Variations in statements for top managers in d, e, f, g, are enclosed in square brackets [ ].
          Figures are ranked in descending order on the mean score for top managers (TM).

MANAGERIAL AND LEADERSHIP QUALITIES

Up to this point, respondents had been asked to give details about their backgrounds including their secondary and further education, training, employment, career development, influences, what motivated them, the tenure of chief officers and the type of activities they undertook. The next two questions asked respondents to consider managerial and leadership qualities.

The wording in the first part of the question varied for top managers and managers. Instead of being given a prompt list of qualities that managers and leaders might possess, respondents were asked to define the qualities spontaneously themselves. In order to avoid textbook type answers, managers' questions were preceded by asking them to give their own opinion. Top managers, on the other hand, were at the peak of the organisational hierarchy and experienced in managerial promotions and management succession. Implicitly, therefore, such a statement was unnecessary and could have put the return of the questionnaire in jeopardy. The proportions mentioned below are based solely on the total number of respondents. There were nine respondents from each group of top managers and managers who did not answer this question. The results show the tendency to put people skills before business and commercial skills. It was also a common feature of the responses that respondents from the nationalised Electricity Industry did not distinguish between leaders and managers, many considered that the answers to the first question on the qualities possessed by managers were the same as those required for leaders.

Question 23.

Top managers: *What qualities do you look for in a manager?*
Managers: *In your opinion, what qualities should a good manager have?*

The most frequently mentioned quality that was expected in a manager concerned 'motivation' (32%). In joint second place respondents suggested 'people skills' and 'good communication skills' (both 22%), followed closely, in fourth place, by 'job knowledge' and 'leadership skills' (21% each). The findings are analysed in Table 42.

Top manager respondents perceived that 'people skills', nominated by one-third (33%) was the most important quality, followed in joint second place by a 'good motivator of staff' who combined 'intelligence with common sense' (both 26%). They also needed to have 'integrity' (23%), and a combination of 'job knowledge', 'leadership skills' and 'enthusiasm' (each 21%).

Manager respondents selected most often the need for a manager to be a 'good motivator' (35%) with 'good communication skills' (26%). These qualities were expected to be backed up with 'job knowledge', 'leadership skills' and 'clarity of purpose' (each 20%). Fewer managers (17%) than top managers (33%), selected 'people skills'.

Table 42

The perceived qualities of a good manager

	TM %	Manager %	Total %
People skills/ability to get on with people/interpersonal skills	33	17	22
Motivator/good motivator of staff/self-motivated	26	35	32
Intellectual competence/ability/intelligence with common sense/agility/grasp	26	13	17
Integrity/honesty	23	15	18
Knowledge/of job/essential knowledge/relevant	21	20	21
Leadership skills	21	20	21
Enthusiasm	21	8	12
Good communicator/communication skills	14	26	22
Drive/'Personal drive	14	6	8
Loyalty	14	2	6
Technical knowledge/technical competence/technical skill	12	10	11
Humour	12	7	8
Clarity of purpose/vision- ie ability to assess problem and take right decision	9	20	17
Experience/business/relevant experience/job experience	9	15	13
Decisive	9	13	11
Professional competence/expertise	9	2	5
Speed and accuracy of work	9	1	4
Commitment	9	0	3
Analytical	7	7	7
Judgement/Sound/good judgement	7	7	7
Consistency/methodical	7	6	6
Control staff/controlling	7	2	4
Hard working	7	2	4
Dedication	7	1	3
Personality	7	1	3
Initiative	7	0	2
Achiever/goal achiever	5	17	13
Delegator/Good delegation skills	5	10	8
Determination	5	7	6
Organiser/organisational ability	2	14	10
Ability to identify/analyse problems and take appropriate action quickly	2	11	8
Developing staff skills/developing others	2	8	6
Receptive and a good listener	0	18	12
Firm and fair	0	10	7
Man manager/good man manager	0	8	5
Respect/ability to earn/command respect	0	7	5
Total respondents (No.)	**43**	**88**	**131**

Question 24

| Top Managers | *What qualities should a good leader have?* |
| Managers | *In your opinion, what qualities should a good leader have?* |

The qualities listed for leaders were similar to those specified for managers and some respondents, one in five top managers (21%) and one in six managers (16%), stipulated that the leadership attributes they expected were the same as for managers. There were, in fact, fewer qualities mentioned for leaders compared with managers, representing a decrease of some 25 per cent (636 qualities specified for a managers compared with 486 suggested for leaders).

The type of qualities that respondents regarded most important for leaders concerned not business or commercial awareness but interactive people skills, good communications and enthusiasm that motivated others, supported by integrity. Again the two groups of respondents did not always share the same view about the attributes that were needed. Fewer top managers nominated the same qualities as managers. The most frequently mentioned attributes came from managers. The findings are analysed in Table 43.

Both groups of respondents proposed a broad range of attributes for a good leader. Among the most frequently mentioned by the two groups were the need for a good leader to be a 'good motivator', ranked in first place (29%), followed by 'good communication skills' (27%), 'people skills' (22%) and 'leadership skills' (16%). The top manager group ranked in joint first place 'good communication skills' alongside 'enthusiasm' (each 23%), supported by the need to be a 'good motivator' (19%) and

'integrity' (16%) was ranked in fourth place. Manager respondents wanted a good

leader to be a 'good motivator', a third (34%) ranked this attribute in first place,

followed closely by the need to be a 'good communicator' (30%), combined with

'people skills' (26%) and leadership skills (20%).

Table 43

Qualities desired in a Good Leader

Question 24	TM %	Mgr %	Total %
Good communicator/communication skills	23	30	27
Enthusiasm	23	10	15
Motivator/good motivator of staff/self-motivated	19	34	29
Integrity/honesty	16	8	11
People skills / ability to get on with people/interpersonal skills/concern for people/talk to people/ walking the job	14	26	22
Clarity of purpose/vision- ie ability to assess problem and take right decision/lucid	14	16	15
Personality/charisma/character/well rounded personality/presence	12	15	14
Decisive/decision making ability	12	13	12
Intellectual competence/ability/intelligence with common sense/agility/grasp	12	5	7
Achiever/goal achiever/ability to set goals	9	15	13
Drive/'Personal drive	9	10	10
Respect/ability to earn/command respect	9	9	9
Receptive and a good listener	9	7	8
Team builder/team member/team worker/team leader	9	5	6
Energy	9	2	5
Leadership skills/lead by example/lead from front	7	20	16
Humour	7	8	8
Ability to identify/analyse problems and take appropriate action/decision quickly	7	7	7
Ability	7	6	6
Knowledge/of job/essential knowledge/relevant	7	5	5
Comprehension/grasp of problems/perception	7	5	5
Tolerance/reasonableness/patience	7	2	4
Determination	5	11	9
Delegator/Good delegation skills	5	7	6
Confidence/inspire confidence/ confidence in advice	2	10	8
Firm but fair	2	10	8
Organiser/organisational ability	2	7	5
Articulate skills/ie ability to speak, argue and persuade/explain	0	7	5
Total respondents (No.)	43	88	131

SELECTING AND DEVELOPING STAFF

So far in the questionnaire respondents had been asked to give details about their backgrounds, education, training and careers. They had been asked what motivated them and about the tenure of chairmen and senior executives. The time they spent at work had been timed and rated in terms of usefulness. Their opinions had been sought about the type of qualities that managers and leaders should possess. In this section, respondents were asked to give details about problems with recruiting staff and whether there were plans for management succession. Two questions were asked of top managers, which were not inserted in the managers' questionnaire. The questions concerned management succession issues that managers themselves were unlikely to have been able to answer. The questionnaire then reverted to similar questions about the selection of managers for posts.

Question 25   Recruitment

This question was in three parts and asked about (a) difficulties in recruiting staff; (b) types of staff it was difficult to recruit, and (c) the perceived reasons for those difficulties.

(a)   Does your organisation have any difficulties in recruiting staff for posts?

Almost two-thirds of respondents said there were problems in recruiting staff (63%), one third said there were no problems (33%), and the remainder did not reply (4%).

(b)   Specify types of staff it has been difficult to recruit.

Some six in ten respondents (61%) specified the types of staff they had difficulty recruiting. There was a demand for staff with computer skills. Half of the top manager respondents (50%) mentioned this problem compared with one in five

managers (20%). Top manager respondents also perceived shortages of accountants

(22%), graduates (19%), environmental engineers (16%), clerical staff (13%) and

electricians (13%). Managers, on the other hand, placed those staff lower in their

perceptions of recruitment difficulties. Some four in ten managers (41%) perceived

that all levels of engineers were hard to recruit, compared with fewer top manager

respondents (6%).

Table 44

Staff recruitment - problems

Question 25(b)	TM	Mgr	Total
Types of staff it has been difficult to recruit.	%	%	%
Computing staff/IT/EDP	50	20	31
Accountants/Financial	22	10	14
Graduates: engineering, accounts, admin.	19	10	13
Environmental engineers (HEVAC①)/building services	16	3	8
Clerical staff	13	10	11
Electricians	13	8	10
Engineers - all levels - junior, low grade, senior	6	41	29
Total number of respondents	32	59	91
Total number of non-respondents	20	38	58
Total number of responses	60	97	157

Note: ① Heating, Ventilation and Air Conditioning engineers.

(c)   Why do you think there were difficulties?

A number of reasons were given by respondents for the problems they experienced in

recruiting certain staff. The most common specified by over one-third (36%) of

respondents concerned pay: 'low pay/salary levels/inadequate remuneration packages'.

Three in ten (31%) said there was also a shortage of 'qualified/specialist or skilled

staff nationally'. One in three top manager respondents (31%) mentioned the

industry's 'poor image/not "blue chip"/not high profile employer', compared with one

in five managers (19%). While managers agreed with top managers on inappropriate

pay levels and national shortages of qualified staff, one-third of them (33%) referred

to 'the market place in London, cost of living in London/south east'. Two issues were

mentioned in relation to London. Firstly, managers said that the London market place was a problem due to the high salaries of for example, merchant banks and insurance companies. Secondly, London was a problem because the salaries paid to people in the industry who worked in boards outside London were unwilling to move to high cost areas where the salary was the same,[17] which discouraged them from considering such moves.

Table 45

Reasons for recruitment difficulties

Question 25(c) *Why do you think you had difficulties [recruiting staff]?*	TM %	Mgr. %	Total %
Pay too low/salary levels inadequate/inflexible grading structure/low remuneration packages	41	33	36
Shortage of qualified/specialist staff/skills/general/national shortage	34	29	31
Poor image of ESI/not 'blue chip'/not high profile employer	31	19	23
London market place/cost living in/high costs people wont move - agreements same in eg HE	19	33	28
Perceived limited career prospects in ESI	9	9	9
ESI unable to compete on fringe benefits externally from more 'glamorous' employers	9	3	6
Shortage of skilled craftsmen; external craftsmen inadequately trained	6	3	4
Universities providing less courses/output from Universities	6	3	4
ESI's bureaucratic recruitment, training policies/personnel dept. ineptitude/personnel policy	3	26	18
Housing and relocation costs/cost of living/travelling to work	3	14	10
External market competition (from Merchant Banks, Insurance etc)	3	7	6
Bureaucratic procedures (affecting limits on employee responsibility)	0	10	7
Uncertainty with privatisation imminent	0	5	3
Total number of respondents	**32**	**58**	**90**
Total non respondents	20	39	59
Total number of responses	58	120	178

Managers were more likely to refer to bureaucratic procedures that operated in the Electricity Industry, which restricted or influenced the recruitment of staff. A quarter of manager respondents (26%) referred to bureaucratic procedures that limited the

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[17] The salaries for all ESI employees were governed by National Agreements. The salaries were the same nation-wide, for those living in rural areas were the same as for those living in London, apart from both Inner and Outer London Weighting/Allowance.

recruitment of external applicants and influenced training and personnel policy. One in ten (10%) said that the bureaucratic procedures limited the expansion of the boundaries of employee responsibility.

Question 26. *Apart from the national recommendation on management training, does your organisation use any of the following techniques for planning for management succession?*

Respondents were asked to select from a list the techniques that were used for management succession planning in their organisations. Not all managers were involved in planning for management succession. In fact, one in five of the manager respondents (21%) said they had no knowledge of such plans in their organisation. Two-thirds (66%) said either that they had no responsibility for planning for management succession (32%); or that they were not involved in such plans (34%). However, this did not prevent them from answering the question. The findings are analysed in Table 46.

Top manager respondents were emphatic about the plans they used to ensure management succession. 'Individual plans for those with senior management potential' and the 'management inventory' secured joint first place among almost nine in ten top managers (both 87%). 'Organisation charts for management development' were used by eight in ten top manager respondents (80%) and ranked in third place. 'Individual plans for those with management potential' were used by two-thirds of top managers (67%) and 'organised talent spotting' was supported by over a half of this group

(53%). Manager respondents were less knowledgeable about the techniques used. Some six in ten manager respondents (60%) selected the 'management inventory' as the most commonly used technique for management succession planning. In second place, a half of them nominated 'individual plans for those with management potential' (51%), followed by 'organisation charts' (46%) and 'individual plans for senior managers' (45%).

While it would be expected that fewer manager respondents would be aware of the use of the various management succession techniques employed in their organisations, there were some considerable differences in what top managers knew to be implemented and what managers perceived to be in use. Comparisons are not strictly accurate because top managers and managers from the same organisation are not being measured and it is assumed that these methods were widespread in the Electricity Industry at the time of the survey. Considerable differences were found between the two groups in relation to the methods used in planning for management succession. For example, manager respondents were less aware of the use of 'organisation charts for management development' (minus 34 percentage points); or 'individual plans for those with senior management potential' (minus 32 points); and 'organised talent spotting' (minus 28 points).

Table 46

Techniques used in planning for management succession

Techniques for planning for management succession	All %	TM %	Mgr. %	Difference TM-Mgr ± %
Management inventory	69	87	60	-13
Individual plans for those with senior management potential	59	87	45	-32
Organisation charts for management development	57	80	46	-34
Individual plans for those with management potential	56	67	51	-16
Organised talent spotting	34	53	25	-28
Long term estimates of future management requirements	31	44	25	-19
Short term surveys of the management position	29	42	23	-19
Named successors	17	20	16	-4
Managers only, (based on 95 respondents)				
I have no knowledge of such plans in my organisation			21	
I have no responsibility for planning for management succession			32	
I am not involved in planning for management succession			34	

Respondents were also asked to list any 'other plans' that their organisation used. These 'other' planning techniques were sometimes specific and sometimes vague. For example, top manager respondents proposed such techniques as 'managerial and technical education courses', 'secondment', 'personal assessment scheme', or 'no specific plan'. Manager respondents perceived use was made of 'individual plans on an ad hoc basis in respect of courses' and that managers were 'given the opportunity to show their talent and develop their potential within the job'. Also mentioned were 'SPASM',[18] 'succession review boards', 'crisis management', 'appraisal of potential and secondment to develop', 'planned secondment', 'staff development scheme' and 'pot-luck'. One respondent commented, 'my board goes through the motions of all these techniques but does not follow through'.

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[18] Staff Performance and Succession Management.

The investigation into management succession continued by asking top managers two additional questions. Managers were not asked these questions because they related to actions that would be taken by senior executives only.

Question 27(TM)   *How do you ensure that plans for management succession are actually carried out?*

Some 38 top managers responded to this question and a half (50%) said that they regularly reviewed, monitored and discussed such plans. A third (32%) mentioned personal involvement with the deputy chairmen only or with the deputy chairman and chief officers. Table 47 analyses the methods used to ensure the effectiveness of plans for management succession.

Table 47

Ways top managers ensure management succession plans are executed

Top Managers only	No.	%
Regular review/regular monitoring/regular discussion/regular audit	19	50
Personal attention/involvement/contact with deputy chairman and chief officers /deputy chairman	12	32
Selective development scheme/development panel/committee	4	11
Annual review	4	11
Chief officers and training officers	2	5
Mentors	1	3
Delegation	1	3
Management appraisal and development	1	3
Personal initiatives to create secondments, career moves to prepare people for possible future vacancies	1	3
Total responses	45	
Total respondents	38	100%

Note: Some respondents mentioned more than one method of progressing management succession plans.

Question 28(TM)   **CENTRALISED PLAN FOR MANAGEMENT SUCCESSION**

The second question asked top managers about the existence of a centralised industry-wide formal plan for management succession; whether the individuals made

recommendations to the plan; the criteria they used; and with whom they discussed

their recommendations. If they responded that they did not have a management

succession plan, they were asked to give reasons for not having one.

Of the 25 top manager respondents who said there was a centralised industry plan for

management succession, 19 said they made recommendations to the plan. It can be

seen from Table 48, that 'known ability' (37%), 'perceived potential' and 'performance

in present post' (each 26%) were the criteria used by top manager respondents in

making their nominations. One in five took into account the individual's 'track

record/achievements' (21%), and one in six referred to the 'personal assessment/

development plan' (16%).

Table 48

Top managers: criteria for selecting managers

What criteria do you use in making your selection(s)?	No.	%
Known ability	7	37
Perceived potential	5	26
Performance/performance in present post	5	26
Track record/achievement	4	21
Personal assessment/development plan	3	16
Appraisal system/formal management assessment	2	11
Suitability for post/fitness for purpose	2	11
Discussions with Central Member, Electricity Council	1	5
General view that individual can achieve ministerial positions	1	5
Keep irons in fire and turn occasionally	1	5
Qualifications	1	5
Secondment	1	5
No specific criteria	1	5
Total number of responses	34	
Total number of respondents	**19**	**100%**

Some three in ten respondents discussed their nominations with the chairman (31%)

or managing director/deputy chairman (28%), other directors (16%), or held

discussions in committee or with the appropriate directorate (13%). One chairman,

two chairmen and one director said that they discussed their recommendations with

the central body at the Electricity Council.

Table 49

People involved in the recommendations for management succession

With whom do you discuss the recommendations?	No.	%
Chairman	10	31
Managing director/deputy chairman	9	28
Executive/chief officers/other directors/senior management team	5	16
Organisation & staffing committee/directorate for chief officer posts/personnel manager/senior managers	4	13
Electricity Council Central Member Industrial Relations	3	9
Electricity Council Chairman	1	3
SPASM progress (Staff Performance, Appraisal and Succession Management)	1	3
Total number of responses	32	
Total number of respondents	**22**	**100%**

Of the nine respondents who said they did not have a management succession plan,

none were board chairmen or board deputy chairmen. Four said that there was no

need for a management succession plan, usually because the unit was too small in

'numerical, geographical or organisational terms' or that the plan was not needed

because 'there has been no shortage of competing talent for management posts in my

field'. Of the five remaining respondents, one commented 'there have been attempts

but all have failed because of the difficulty of maintaining credibility in such plans'.

Two respondents said that 'an informal approach' was either taken, or was wisest.

Two respondents said that 'senior executives would not commit themselves'.

Table 50

Reasons for not having a management succession plan

Reasons for not having a management succession plan	No.	%
No need for it (no shortage of managers/organisation is small geographically, numerically, organisationally)	4	44
Informal system is wisest/informal approach is taken	2	22
Senior executives won't commit themselves	2	22
To be developed	1	11
Total responses	9	
Total respondents	**9**	**100%**

SELECTING MANAGERS FOR POSTS

It was assumed that top managers would be experienced in selecting or approving people for a managerial position, whereas this would not necessarily be the case for a manager. In order to allow for this distinction in managerial responsibility, the wording of the questions were slightly different for each group. It has been assumed that the variation in the questions would not affect comparisons between the two groups of managers.

Question 29(TM)

Top Managers   *In selecting or approving staff for a managerial position, how do you rate the following in terms of importance when making your decision?*

Managers   *Assuming that you were selecting or approving staff for a managerial position, how would you rate the following in terms of importance when making your decision?*

Questions 23 and 24 had asked respondents to nominate the qualities that they expected a manager or a leader to possess. In this question respondents were presented with a list of qualities that they might take into consideration when they were selecting or approving individuals for managerial positions. They were asked to rate, using a predefined scale, each item according to the importance that they would place upon it when making their selection decision. The rating scale[19] ranged from 1 (not at all important) to five (very important). Of the 25 factors listed, top managers rated nine of them higher than managers, including four that were rated as 'not very/not at all important'.

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[19] Defined in the Methodology.

Again, respondents selected the factor through which organisations succeed or fail, the implicit recognition that success depends on the work carried out by organisations' employees. Thus, it was crucially important that managers were able to recognise and to harness employees' abilities and 'motivate' them to give of their best (almost all (99%) the respondents said this was 'very' or 'fairly' important). However, managers needed to support this ability with 'drive' (85%), 'intelligence' (86%), the ability to 'think' things through (86%), 'enthusiasm' (84%), 'knowledge' (81%), the 'ability to get on with others' (83%), 'knowledge' (81%), 'problem solving' (80%) and 'innovatory skills' (78%) supported by a 'track record' (75%). The findings are analysed in Table 51.

Top manager respondents based their selection on 'the ability to motivate staff' (mean 4.7), 'drive' (4.37), 'intelligence' (4.33), 'thinking ability' (4.26), 'enthusiasm' (4.2), 'knowledge' (4.14), the 'ability to get on with others' (4.07), 'track record' (4.07), 'innovatory skills' (4.07) and the ability to 'solve problems' (4.0). Manager respondents chose the same ten motivators as top managers but gave them a different rank, except for the first, which was the 'ability to motivate staff' (mean 4.8). In second place managers ranked 'enthusiasm' (4.32), followed by 'thinking ability' (4.27), 'problem solving' (4.26), the 'ability to get on with others' (4.23), 'intelligence' (4.23), 'drive' (4.2), 'knowledge' (4.13), 'track record' (4.09) and 'innovatory skills' (3.94).

Differences between top manager and manager respondents

'Drive' was an important factor among top manager respondents but manager respondents rated it less important. Top managers also rated more important than managers 'innovatory skills' and 'intelligence'. On the other hand, manager respondents placed more importance than top managers on 'problem solving skills', the 'ability to get on with others', 'enthusiasm', and the 'ability to motivate staff'.

Table 51

Importance of specific factors in selecting managers

	Importance		Responses		Mean Scores		
	Very/ Fairly	Not/ Very/ at all	All replies Total	No reply Total	All replies	TM	Mgr.
Factor	%	%	No.	No.	mean	mean	mean
Ability to motivate staff	99	0	140	9	4.77	4.70	4.80
Drive	85	2	136	13	4.26	4.37	4.20
Intelligence	86	1	137	12	4.26	4.33	4.23
Thinking ability	86	1	139	10	4.27	4.26	4.27
Enthusiasm	84	1	140	9	4.29	4.20	4.32
Knowledge	81	1	137	12	4.13	4.14	4.13
Ability to get on with others	83	0	139	10	4.18	4.07	4.23
Track record	75	1	135	14	4.08	4.07	4.09
Innovatory skills	78	4	136	13	3.98	4.07	3.94
Problem solving	80	1	136	13	4.18	4.00	4.26
Flexibility	67	1	136	13	3.94	3.86	3.98
Persistence	71	6	138	11	3.91	3.84	3.95
Personal style	62	5	137	12	3.79	3.76	3.80
Team spirit	68	5	137	12	3.88	3.70	3.96
Ambition	43	14	137	12	3.39	3.67	3.27
Qualifications	56	10	138	11	3.61	3.58	3.62
Experience in that work	47	11	137	12	3.54	3.45	3.58
Their critical abilities	55	10	134	15	3.60	3.36	3.72
Humour	46	9	138	11	3.47	3.23	3.58
Experience in other locations	33	19	137	12	3.19	3.14	3.21
Experience in other boards	17	45	134	15	2.62	2.79	2.54
Need for further development	11	35	125	24	2.59	2.77	2.51
Age	12	48	137	12	2.49	2.51	2.48
Length of time in previous posts	4	58	133	16	2.27	2.29	2.26
Hobbies/leisure activities	4	68	132	17	1.92	1.90	1.93

Note: The figures are arranged in descending order on the mean score for top managers.

Surprisingly, or perhaps because they were already widespread, less than six in ten respondents (56%) said they would take 'qualifications' into account when deciding on the selection of someone for a managerial position. Managers with a mean score of 3.62 rated this more important than top managers (mean score 3.58).

For these two groups of respondents, 'hobbies/leisure activities' were considered to be of little importance by almost seven in ten respondents (68%). Unlike the factors that made for the 'whole, rounded individual' that was important in the years following nationalisation.

STRUCTURE OF THE ESI

In this section of the questionnaire, respondents were given the opportunity to respond to ways in which the Electricity Industry had been criticised about its organisation, management and industrial relations. Some of the criticism had come from managers themselves, from employees, the media and others outside the industry. The aim of this section was to investigate whether there was any substance to the allegations. The support given to the first three answers indicates that respondents were critical of the committee and reporting procedures that had been developed and would respond positively to changes in existing administrative and management procedures.

Question 30(TM)   *Regarding the ESI now, how do you rate the following statements?*

Respondents were presented with a list of nine statements which typified those that adversely criticised the Electricity Industry. They were asked to rate the statements on

a scale[20] from 1 to five, where 1 meant that they strongly disagreed and 5 that they strongly agreed with the statement.

Out of the nine statements, top manager respondents were more inclined to agree with seven of them than manager respondents. The results, analysed in Table 52, are ranked in order of importance to top managers.

1.   There are too many committees

At least eight in ten respondents (85%) thought that there were too many committees. Top managers, with a mean score of 4.55, were more likely to agree with this statement than managers (mean 4.16).

2.   The line of command should be shorter

Three-quarters of respondents (74%) wanted a shorter chain of command. Top managers (mean 4.31) more than managers (3.83).

3.   There are too many levels of management

At least six in ten (63%) agreed with this statement, which supports item 2 above and would make the line of command shorter. Top managers (mean 3.9) were more likely to support this than managers (mean 3.59).

4.   There are too many rules and procedures

Almost six in ten (58%) agreed with this statement. Top manager respondents (mean

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[20] Defined in the Methodology.

3.76) were slightly more in agreement than manager respondents (3.69).

5.   There is too much consultation with unions

Some four in ten (42%) thought this but a quarter (26%) disagreed, producing lower

mean scores for top managers (3.43) and managers (3.21).

6.   There is too much consultation generally

Almost twice as many disagreed (43%) with this statement than agreed (25%) with it.

7.   Staff are over qualified

As many agreed (36%) as disagreed (35%) with this statement, and top managers

(mean 2.76) were less likely to agree with it than managers (mean 3.11).

8.   There is too much consultation with staff

Over six in ten (64%) respondents disagreed that there was too much consultation

with staff.

9.   There are too many managers

Half (52%) the respondents thought there were too many managers and one third

disagreed.

Table 52

Current attitudes towards the ESI

Statement	Agree/ Strongly %	Dis- agree Strongly %	Total replies No.	No reply No.	All mean No.	TM mean No.	Mgr. mean No.
There are too many committees	85	5	138	11	4.28	4.55	4.16
The line of command should be shorter	74	15	138	11	3.98	4.31	3.83
There are too many levels of management	63	18	138	11	3.69	3.90	3.59
There are too many rules and procedures	58	14	138	11	3.71	3.76	3.69
There is too much consultation with unions	42	26	138	11	3.28	3.43	3.21
There is too much consultation generally	25	43	137	12	2.75	2.88	2.69
Staff are over qualified	36	35	136	13	3.00	2.76	3.11
There is too much consultation with staff	12	64	137	12	2.31	2.15	2.38
There are too many managers	52	32	138	11	1.21	1.27	1.17

Note: Figures are arranged in descending order on mean score for top managers.
Percentages do not sum to 100% because the scores for those who gave a neutral response and rated the statements 3 are excluded from the table.

Question 31(a) TM *Do you think that some staff are under-qualified?*
Question 31(b) *Which Staff?*

The findings from this question are analysed in Table 53. Some 38 respondents thought some staff were under qualified. A quarter of them (26%) mentioned managers, in some instances adding comments, such as:

> *Managerial staff have adequate technical qualifications but inadequate managerial skills.* (top manager)

> *Managers in respect of management skills.* (manager)

> *Middle managers underqualified in management education.* (top manager)

> *Senior management for privatisation requirements.* (top manager)

One in five (21%) thought some accountancy or financial staff under-qualified, one added a distinction:-

> *Financial staff in area boards in England and Wales. ie Accountants not financial managers.* (manager)

Shortages of commercial/marketing and engineering staff were mentioned by some 13

per cent of respondents.

Explanations were also given about engineering staff:-

Engineering staff are generally under-qualified for say second engineer positions and hence carry less responsibility than they should. (top manager)

I have second and third engineers on my staff without engineering qualifications - this should not be necessary. (manager).

Significant proportion of engineering and commercial staff who entered the industry during the early growth era. (top manager)

Engineers under-qualified as managers. Overqualified as engineers! (manager)

Young graduate engineers. The complexity of modern power system equipment means longer training which very often conflicts with personal ambition. (manager).

Too many engineers are employed to do technicians jobs. (top manager)

Table 53

Type of staff perceived to be under-qualified

	No.	%
Managerial/managers	10	26
Accountancy/financial	8	21
Commercial/marketing	5	13
Engineering staff	5	13
Secretarial/Administration	4	11
Supervisory	3	8
Personnel	3	8
Shop/showroom staff	3	8
General clerical	3	8
Procurement/contract	3	8
Unqualified people in professional posts	2	5
NJC staff	1	3
Female staff	1	3
Senior staff	1	3
Team leaders	1	3
Other low grade industrial/technical	3	8
Total responses	56	
Total respondents	38	100%

Other criticisms referred to lower standards in training, entry qualifications and professional posts:-

> *My personal feeling is that NJC staff should at least have GCE or CSE maths and English - we are recruiting below this standard at present.* (manager).

> *The poor recruitment policy of the ESI has resulted in some inadequate staff being recruited/promoted.* (manager).

> *Generally female staff due to lack of training and motivation.* (manager).

> *Many of our professional posts are filled by less than ideally qualified people.* (manager).

One CEGB comment:

> *If "qualified" means generally lacking in ability and potential - yes. Paper qualifications may or may not be relevant, but I suspect that in power stations NJB staff are often over-qualified for their roles.*

PRIVATISATION

Up to this point respondents had been asked about their backgrounds and their jobs. In this final section of the study, the findings concern the Electricity Industry which was facing the prospect of privatisation. Respondents were asked questions that concerned the effect of privatisation their organisations, their jobs, their futures and the cascading effect on their employees' jobs and futures.

Question 32(TM)   *Rate each of the following statements* [concerning the effect of privatisation]

Respondents were given a list of some 25 statements which described ways in which the Electricity Industry could be affected by the introduction of privatisation. They were asked to state, by rating each statement, their level of agreement that

privatisation was likely to change things. The rating scale[21] that was used to measure

the level of agreement ranged from 1 (strongly disagree) to 5 (strongly agree). The

results are analysed in Table 54 and ranked on the responses from top managers.

Table 54

The effect of privatisation

Question 32	Agree/ Strongly	Disagree Strongly	All mean	TM mean	Mgr. mean
1 More emphasis on profits	99	0	4.57	4.55	4.58
2 Need for new managerial skills	88	4	4.26	4.34	4.22
3 Introduction of performance pay & rewards	84	4	4.08	4.30	3.98
4 Organisational changes	83	0	4.29	4.23	4.32
4 Need to buy in managerial skills	70	14	3.81	4.23	3.61
6 Changes to the ESI's corporate objective	85	5	4.11	4.19	4.07
7 Changes in management style	88	2	4.15	4.07	4.19
8 Penalties for targets not met	73	3	3.89	3.98	3.85
9 Increased risk taking	71	11	3.78	3.86	3.74
10 More direct action	67	4	3.84	3.80	3.86
11 More cost cutting	74	5	4.00	3.73	4.13
12 Less need for national agreements	64	18	3.59	3.64	3.57
13 More freedom in decision making	57	11	3.58	3.62	3.57
14 Decentralisation of decision making	52	17	3.44	3.53	3.40
15 Increased flexibility from staff	63	11	3.63	3.50	3.69
16 Increased delegation to lower management	56	17	3.47	3.34	3.54
16 Fewer internal meetings	40	17	3.30	3.34	3.28
18 More meetings with bodies external to ESI	41	17	3.29	3.23	3.32
19 Difficulty in maintaining the ESI's corporate objective	44	17	3.36	3.21	3.43
20 Less paperwork generated	34	33	3.15	3.02	3.20
21 Less form filling	29	27	3.04	2.95	3.09
22 Loss of synergy	29	31	2.98	2.85	3.04
23 Weakening of oral communications network	14	46	2.56	2.63	2.53
24 Fewer training facilities	16	50	2.61	2.55	2.64
25 Less mobility for staff	16	50	2.55	2.52	2.56

Note: The figures are arranged in descending order on the mean score for top managers.

Top manager respondents rating scores were higher than manager respondents for ten

of the 25 statements. Top manager respondents thought that privatisation would

result in 'more emphasis on profits' (mean score 4.55), 'the need for new managerial

skills' (4.34), the 'introduction of performance pay and rewards' (4.3), 'organisational

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[21] Ibid.

changes' (4.23), the 'need to buy in managerial skills' (4.23), 'changes in the corporate objective' (4.19), 'changes in management style' (4.07), 'penalties for missed targets' (3.98) and 'increased risk taking' (3.86). While manager respondents shared the same views as top manager respondents concerning the effects of privatisation, it can be seen from the table that their level of agreement varied, in some cases considerably.

Fewer training facilities

The Electricity Industry had a forty year record of training its staff and the electricity boards had build their own training centres where training was not provided nationally or not available from external providers. Training is usually the one of the first casualties of recession and it followed that privatisation might have the same effect on training. However, half (50%) the respondents disagreed, and one in six (16%) agreed, that there would be fewer training facilities with privatisation. Three in ten respondents remained neutral: including slightly fewer top managers (32%) than managers (36%).

Less mobility for staff

Employees were usually assured of a broad range of job opportunities in their own boards or other electricity boards because vacancies were advertised within the industry. Privatisation could affect the opportunities for mobility within the industry. Half (50%) the respondents disagreed, and one in six (16%) agreed, that there would be less mobility.

Differences between respondents

Table 55 analyses the differences between the two groups of respondents in relation to their level of agreement with the statements on privatisation. Both groups of respondents shared similar views in relation to the effects of privatisation but there were some distinct differences between their scores.

Table 55

Difference between Top Managers and Managers Scores
Perceptions of the effect of privatisation

TM Rank	Top Managers level of agreement with these statements is higher than managers	Mean Score difference
4	Need to buy in managerial skills	0.62
3	Introduction of performance pay & rewards	0.32
8	Penalties for targets not met	0.13
14	Decentralisation of decision making ·	0.13
2	Need for new managerial skills	0.12
6	Changes to the ESI's corporate objective	0.12
9	Increased risk taking	0.12
23	Weakening of oral communications network	0.10
12	Less need for national agreements	0.07
16	Fewer internal meetings	0.06
13	More freedom in decision making	0.05
TM Rank	**Top Managers level of agreement with these statements is lower than managers**	**Mean Score difference**
11	More cost cutting	-0.40
19	Difficulty in maintaining the ESI's corporate objective	-0.22
16	Increased delegation to lower management	-0.20
15	Increased flexibility from staff	-0.19
22	Loss of synergy *	-0.19
20	Less paperwork generated	-0.18
21	Less form filling	-0.14
7	Changes in management style	-0.12
4	Organisational changes	-0.09
18	More meetings with bodies external to ESI	-0.09
24	Fewer training facilities	-0.09
10	More direct action	-0.06
25	Less mobility for staff	-0.04
1	More emphasis on profits	-0.03

It can be seen from the table that top manager respondents, more than manager respondents, foresaw the 'need to buy in managerial skills (plus 62 points), and the 'introduction of performance pay' (plus 32 points). Manager respondents foresaw

'cost cutting' to be a product of privatisation but top managers did not agree with them to the same extent, resulting in a difference between the two groups of minus 40 points.

Question 33(TM)   *In your view, do managers need qualifications, knowledge and experience to work in a privatised organisation, which are different from those needed to work in a nationalised one?*

There was no prompt list to help respondents with their answers to this question, they were required to give their spontaneous replies. The results are analysed in Table 56. Almost six in ten respondents (58%) thought managers needed additional skills. Those most frequently mentioned by top manager respondents concerned corporate finance (55%), shareholder dealings (29%) and treasury/taxation matters (19%). Managers also selected corporate finance (46%) and around a quarter highlighted the competitive market (23%).

The differences between top managers and managers are shown in the right hand column of the table. The greatest difference (+29 percentage points) concerned the perception by top manager respondents that shareholder skills would be needed. Conversely, none of the top manager respondents mentioned the competitive market/commercial culture/market orientation resulting in a difference of -23 percentage points.

Table 56

What qualifications do managers need to work in a privatised organisation that are different from a nationalised one?

	TM	Mgr.	All	TM-Mgr.
	%	%	%	+/- %
Corporate finance/financial contracts/financial control/financial PR	55	46	49	9
Shareholders/shareholder admin/shareholder relations	29	0	11	29
Treasury/taxation	19	12	14	7
Risk assessment/risk management/better judgement what to do next	10	8	8	2
Marketing	10	13	12	-3
Contract negotiation/contracts/specialists	10	13	12	-3
Secretarial/Company Secretary	6	0	2	6
Innovative(challenge	6	2	4	4
Accounting	6	4	5	2
Business management/business orientated/business acumen	6	6	6	0
Company law/law/takeover/legal	6	6	6	0
Stock exchange/stock markets	6	8	7	-1
Profit creation/profit motivation/profit maximisation/profit motive	6	10	8	-4
City	6	10	8	-4
Cost control	3	12	8	-9
Competitive market/commercial culture/market orientated	0	23	14	-23
Total responses (No.)	67	108	175	
Total respondents(No.)	31	52	83	

STRUCTURE FOR PRIVATISATION

Question 34(TM)   *Give your rating of the proposed structure for the privatised ESI between 1 and 5, where 5 is a very good structure, 4 is good, 3 average, 2 is poor, and 1 is a very poor structure.*

Respondents were aware of the published proposals for the structure of the privatised

Electricity Industry and they were asked to give their opinion of the way their industry

was likely to be reorganised. The results are analysed in Table 57.

Over a third (36%) of respondents thought the structure was 'poor' or 'very poor'.

While a similar proportion (37%) rated it as 'good/very good'. Opinions were diverse

among the two groups. Top manager respondents anticipated the changes positively

but manager respondents were critical. Among top manager respondents, over half (55%) thought the structure was either 'good' (31%) or 'very good' (24%). Manager respondents (45%), on the other hand, were more inclined to say the structure was 'poor' (29%) or 'very poor' (16%). Three in ten (29%) top manager respondents and a quarter (25%) of manager respondents remained neutral. It can be seen from the mean scores that top manager respondents (mean score 3.55) rated the proposed changes more positively than managers (mean score 2.73) resulting in the greatest difference between the two groups of respondents (+0.82).

There was relatively little difference in opinion between newcomers and long serving employees. However, over half the CEGB manager respondents thought the proposed structure was 'poor' or 'very poor', while over half the Area Board manager respondents thought it was 'good' or 'very good'. Scottish manager respondents responses were evenly distributed while the Electricity Council manager respondents decided it was either 'poor' or 'average'.

Table 57

The Proposed Structure for the privatised Electricity Supply Industry

	All %			TM %	Mgr. %	TM-Mgr. %
Very poor	13	)		7	16	-9
Poor	23	)	36	10	29	-20
Average	27			29	25	+4
Good	26	)		31	24	+7
Very good	11	)	37	24	5	+19
Mean score	2.99			3.55	2.73	+0.82
Respondents	134			42	92	

Question 35(TM) *Has your view of the effectiveness of the structure of the ESI varied over time*

Respondents were presented with four time periods and asked to select the comment which most closely represented their view about the structure of the industry against each time period. The comments listed ranged from 'very good' to 'very poor'. The first time period from 1948 to 1956 began with nationalisation in 1948 and ended before the first reorganisation in 1957. The subsequent periods were at ten year intervals. The period 1957-66 began with the reorganisation of the industry and the creation of the Electricity Council and the Central Electricity Generating Board. The third period 1967-76 included the Plowden report which concerned the structure of the industry. It was also a period when the industry was still growing and in which employment reached its highest point. The final period, 1977-86, led up to privatisation and was a period in which units generated, capital expenditure and the number of customers continued to grow. The findings are analysed in Table 58.

The proportion of respondents was considerably smaller for the earlier periods which suggests that they were relying on employment experience within the industry to voice an opinion rather than historic knowledge.

Top manager respondents showed a greater variation in the scores for each period, with the earlier periods credited to have the better structures. Results for manager respondents, on the other hand, were more evenly distributed for each time period.

1948-1956

While some six in ten respondents did not give a reply to this part of the question, top manager respondents considered that the first period comprised the best structure. The majority of top manager respondents (89%) who replied thought that the structure during this period was either 'good' (65%) or 'very good' (24%), compared with a half of manager respondents (51%).

1957-66

For the period following the first reorganisation of the industry, most top manager respondents (60%) thought the structure was 'good/very good' compared with a similar proportion of manager respondents (57%). None of the top manager respondents thought the structure was 'poor'.

1967-1976

Over four in ten respondents preferred to remain neutral about the structure between 1967-1976 while a half thought it was either 'good' or 'very good'.

1977-1986

During the last ten years before privatisation, respondents gave mixed replies. Most top manager respondents (41%) remained neutral about the structure, while 20% thought it was 'poor' and 39% thought it was 'good/very good'.

The managers responses were more evenly distributed for each time period and a half

(51%) thought that the structure was 'good/very good' for each period except for

1957-66 when a slightly higher proportion (57%) praised the structure.

Some respondents volunteered comments on the structure to support their answers.

One comment from over the border:

> *In Scotland over the period from 1956 to present, HQ has grown by a factor of four while total staff in the SSEB as a whole is half of what it was (26,000-12,000). Local unit managers have lost much of their authority and have not now the scope to manage that they had. Decision making is largely concentrated in HQ, reducing local responsibility considerably.*

Scotland was the same pre-1956.

One respondent commented about the 1967-76 period:

> *Plowden. Inquiries. Uncertainties. Problem of profitable structure not suitable for its time in period. Weak politicians.*

Table 58

The effectiveness of the structure of the ESI

1948-1956	All %	TM %	Mgr. %	TM-Mgr. ± %
Very poor	0	0	0	0
Poor	15	6	19	-13
Average	22	6	30	-24
Good	39	65	27	+38
Very good	24	24	24	0
Mean score	3.72	4.06	3.57	
Respondents No.	54	17	37	
No reply	95	35	60	
1957-66				
Very poor	0	0	0	0
Poor	3	0	5	-5
Average	38	39	38	+1
Good	50	46	52	-6
Very good	8	14	5	+9
Mean score	3.63	3.75	3.57	
Respondents No.	86	28	58	
No reply	63	24	39	
1967-76				
Very poor	0	0	0	0
Poor	6	8	5	+3
Average	44	45	43	+2
Good	42	37	44	-7
Very good	8	11	7	+4
Mean score	3.53	3.5	3.54	
Respondents No.	119	38	81	
No reply	30	14	16	
1977-86				
Very poor	2	0	2	-2
Poor	19	20	18	+2
Average	32	41	28	+13
Good	38	32	41	-9
Very good	9	7	10	-3
Mean score	3.35	3.27	3.38	
Respondents No.	133	41	92	
No reply	16	11	5	

Question 36(TM). *Do you think that the effective operation of the ESI has been hindered by any influences beyond its control?*

If respondents agreed with this supposition, they were asked to complete the final question. Those who answered 'No' were thanked for completing the questionnaire. Respondents had almost completed their marathon task but remained keen to complete the final question in the questionnaire. Some nine in ten (90%) respondents

felt that the Electricity Industry's effective operation had been hindered by influences beyond its control.

Has the effective operation of the ESI been hindered by any influences beyond its control?

	All %	TM %	Mgr. %
Yes	90	90	90
No	10	10	10
Respondents (No.)	134	41	93

Question 37(TM)   *Which, if any of the following have hindered ESI effectiveness?*

Respondents were asked to select, from a list of 17 potential influences, the ones that they thought had hindered the Electricity Industry's effectiveness and by implication, the management. Items numbered 1 to 12 inclusive described the different parts of the ESI. Items 13 to 17 inclusive concerned ways in which government could impose its decisions on the management of the industry's affairs. The question dealt with issues concerning the perceived internal conflict among the organisations and the government's role in the industry's affairs. The findings are analysed in Table 59 and ranked in descending order of top managers' responses to the list. It is clear from the results that respondents were dissatisfied with the way in which the Government's decisions had affected the management decision making in the industry itself. There was less concern from respondents that the ESI's constituent bodies were likely to have had a detrimental effect on the industry.

The greatest difference of opinion between the two groups of respondents related to the ways in which the government may have influenced decisions affecting the

operations of the Electricity Industry. In particular, the managers' responses to the statements were found to be higher than the top managers, with the exception of 'government interference' and 'government direction on pay', when more top manager respondents than manager respondents supported the two statements.

It should be noted that analysis of respondents according to their respective organisations is based in some instances on small numbers and care must be taken when interpreting differences between these small sub-groups.

Ways in which the Government influenced the effectiveness of the ESI

<u>Government interference</u>

Top manager respondents (95%) and manager respondents (93%) alike considered that 'Government interference' had hindered the effectiveness of the Electricity Industry's operations.

<u>Government direction on pay</u>

Some six in ten of top manager respondents (62%) and a half of manager respondents (49%) thought government's direction on pay had not been helpful.

<u>Government direction on fuel for power stations</u>

Manager respondents felt more strongly than top manager respondents about the Government's direction on fuel for power stations. Some eight in ten managers (82%), compared with four in ten top managers (43%), thought the Government's directive was a hindrance; (a difference in perception between the two groups of some 39 percentage points).

Government direction on type of power stations to be built

Again, manager respondents felt more strongly about this issue than top manager respondents. Three quarters of manager respondents (75%), compared with one third of top manager respondents (32%), thought this type of direction hindered the effectiveness of the industry. The difference in opinion between the two groups resulted in a net[22] score of minus 43 percentage points.

Government selection of ESI top management

Almost half the manager respondents (46%) and one third (32%) of top manager respondents were concerned that government's role in the selection of ESI top management could have affected the ESI's operations. The difference between the top managers and managers was a net score of minus 14 percentage points.

Ways in which the ESI's constituent parts had hindered its effectiveness

Few top manager respondents criticised the constituent parts of the Electricity Industry. Top manager and manager respondents alike were loyal to their employing organisations and least likely to be critical of them.

Electricity Council

More top manager respondents (41%), than manager respondents (24%) thought the Electricity Council had hindered the ESI's effectiveness, resulting in a 17 percentage point difference of opinion between these two groups. Most of the top manager respondents who held this view were from Area Boards (44%).

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[22] Defined in the Methodology.

CEGB

Over a quarter of top manager respondents (27%) and a similar proportion of managers (26%) criticised the CEGB for hindering the industry's effectiveness. Area Board top manager respondents (36%) were more likely to hold this view than the rest.

CEGB Nuclear Power Stations

A quarter (24%) of top manager respondents and slightly fewer managers (18%) apportioned criticism to the CEGB's nuclear power stations for affecting operations.

Other constituent parts

The remaining bodies that were listed received less criticism than those mentioned above.

Table 59

Negative influences on the effectiveness of the ESI

Which of the following have hindered ESI effectiveness?	All	TM	Mgr.	TM-Mgr.
	%	%	%	+/- %
Government interference	93	95	93	2
Government direction on pay	53	62	49	13
Government direction on fuel for power stations	70	43	82	-39
Electricity Council	29	41	24	17
Government direction on type of power stations to be built	62	32	75	-43
Government selection of ESI top management	42	32	46	-14
CEGB	26	27	26	1
CEGB Nuclear Power Stations	20	24	18	6
Area Boards HQ	11	16	8	8
CEGB Divisions	14	11	15	-4
CEGB HQ	12	8	13	-5
Area Boards	9	8	10	-2
Area Board Divisions/Districts	6	5	6	-1
CEGB Transmission	6	3	7	-4
CEGB Fossil fuel stations	4	3	·5	-2
SSEB	2	0	4	-4
NSHEB	2	0	2	-2
Respondents (No.)	121	37	84	

Note: Figures are arranged in descending order on the column for top managers.

<u>Name</u>

PERSONAL DATA

1. <u>Job Title in Industry</u>

2. <u>Employing organisation</u>

3. <u>Total length of employment in ESI [years]</u>

4. <u>No. of staff responsible for</u>

5. <u>Honours, academic and honorary degrees, membership of associations etc</u>
   [please list using abbreviations where possible]

6. <u>Age group</u>
   [tick the group that includes your age at 31.12.1988]

   <u><35</u>   <u>35-39</u>   <u>40-44</u>   <u>45-49</u>   <u>50-54</u>   <u>55-59</u>   <u>60-64</u>   <u>65+</u>

SECONDARY SCHOOL EDUCATION

7. <u>Which of the following categories describes your last school</u>
   [tick against school and state the year in which you left school.]

Type of School [tick]	*Year you left school [state]*
<u>Secondary modern</u>	
<u>Comprehensive</u>	
<u>Grammar</u>	
<u>Sixth form college</u>	
<u>Private fee paying</u>	
<u>Public School</u>	
<u>Other [specify]</u>	

FURTHER EDUCATION

8. <u>Did you complete a course of Further Education.</u>

   YES ___ *[continue below]*

   NO ___ *[go to question 9.]*

Tick against the following list, or state, the type of educational institution that you attended; and tick, or state, the type of course you completed.

College/University etc [tick]	*Type of course [tick]*	*Year*	*Year*
<u>College of Further Education</u>	<u>Engineering</u>	From	To
<u>Polytechnic</u>	<u>Accountancy</u>	From	To
<u>Technical College</u>	<u>Science</u>	From	To
<u>University</u>	<u>Economics</u>	From	To
<u>Other [state]</u>	<u>Other [state]</u>		
		From	To

EARLY TRAINING

9. **State type of training**
[eg apprentice/graduate/admin/management trainee;   employer and date]

Type of Training	Name of Employer	From [year]	To [year]

EMPLOYMENT IN ESI

10. **Posts in ESI**
   [give job titles; grades; employing organisation and dates]

Job Title	Grade	Employer	From [year]	To [year]

CAREER DEVELOPMENT

11. **Courses attended during employment in ESI: ESI, external and self-development.**
[give course titles or nearest recollection, length of course in weeks (w), months (m), or years(y); date of course. State type of course ie, ESI internal, ESI external, ESI overseas, self-development]

	[brief] Course title	Length	Date(s)	Day/evening	Type
1.					
2.					
3.					
4.					
5.					
6.					

471

12. **Methods of learning that you have found most useful**
[rate from 1 to 5, where 5 = the most useful, 4 = fairly useful, 3 = average,
2 = not very useful and 1 = not at all useful.]

Rating

1.	Lectures .	___
2.	Discussion groups/seminars/syndicates.	___
3.	Case study (historical)	___
4.	" " (hypothetical)	___
5.	" " (to be solved by you)	___
6.	" " (to be solved by team)	___
7.	Role playing	___
8.	Business/Management Games	___
9.	Reading	___
10.	Examined courses	___
11.	Programmed instruction	___
12.	TV/Video Films about business .	___
13.	ESI Video films of you communicating .	___
14.	Other methods [specify and rate]	

_____ ___

_____ ___

_____ ___

13. **Type of career development you found most useful**
[rate in order of usefulness where 5 = most useful, 4 = fairly useful,
3 = average, 2 = not very useful, and 1 = not at all useful.]

Rating

1.	Attendance at ESI courses .	___
2.	Attendance at external courses	___
3.	Learning on the job	___
4.	Handling a project in own board	___
5.	Handling a project in another board .	___
6.	Secondment in ESI	___
7.	Secondment outside ESI	___
8.	New job through promotion .	___
9.	Writing and/or speaking	___
10.	Feedback through appraisal.	___
11.	Other [please specify and rate] _____	

_____

- 4 -

14. (a) <u>Which of the following skills would you have liked to develop that would have been useful to you in your career in the ESI.</u>

[rate from 1 to 5, where 5 = most useful to have developed, 4 = fairly useful, 3 = average, 2 = not very useful, 1 = not at all useful.]

		<u>Rating</u>
1.	Finance and Accounting .	___
2.	Industrial Relations .	___
3.	Marketing . .	___
4.	Business studies# .	___
5.	Law . .	___
6.	Economics - macro .	___
7.	Economics - industrial .	___
8.	Human Relations .	___
9.	Statistics . .	___
10.	Business analysis# .	___
11.	Computer skills .	___
12.	Stock Market knowledge .	___
13.	Corporate strategy .	___
14.	Developing staff .	___
15.	Other [specify]_____	

(b) <u>Give reasons for not developing these skills</u> _____

_____

_____

WRITERS AND THEORISTS

15. <u>Have you been influenced by a specific book or books during your career</u>?

YES___ *[continue below]*

NO ___ *[go to question 16]*

If yes state below title of book(s) and/or author

_____

_____

_____

_____

16. <u>Have you been influenced by any theories or theorists</u>
    <u>during your career?</u>

> YES ___ *[continue below]*
>
> NO   ___ *[go to question 17]*

> *If yes, state briefly nature of theory and, if possible, name of*
> *theorist*

_____

_____

_____

MOTIVATING MANAGERS

17. <u>How would you rate the following in terms of importance for motivating</u>
    <u>your managers?</u> Include those which may not be available now but could
    be with privatisation.
    [rate all from 1 to 5, where 5 is most important, 4 is fairly important,
    3 is average, 2 is not very important and 1 is not at all important as a
    motivator.]

		Rating
1.	Performance pay and rewards .	_____
2.	Annual increments . .	_____
3.	Bonuses . . .	_____
4.	Salary differentials . .	_____
5.	Fringe benefits,eg Co. car, health ins	_____
6.	Pension . . .	_____
7.	Security . . .	_____
8.	Clear career path . .	_____
9.	Planned personal development .	_____
10.	Recognition for work well done .	_____
11.	Feedback . . .	_____
12.	Able superiors . .	_____
13.	Status . . .	_____
14.	Prestige . . .	_____
15.	Respect . . .	_____
16.	Right to manage . .	_____
17.	More freedom of action .	_____
18.	More responsibility . .	_____
19.	Fewer reporting procedures .	_____
20.	Freedom from union-employer agreements	_____
21.	Other motivators *[specify]*_____	_____
	_____	_____
	_____	_____

18. <u>Before you reached Chief Officer level what length of time do you think you ought to have spent in ESI posts</u>
[state post(s) and circle time period that you think you ought to have spent in that post]

<u>State posts</u>   <u>Time period (years)</u>
                                                    [circle relevant period]

(a) _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

    _____   1   2   3   4   5   >5

[If you have not stated any posts, go to question 19. Otherwise continue with part (b).]

(b) <u>Did you, on average, achieve your preferred time in the post(s)</u>

                          [tick]
              YES ___   *[go to question 19]*

              NO ___   *[continue below]*

*If no, give reasons*_____

_____

_____

_____

POSTS OCCUPIED BY CHAIRMEN AND SENIOR EXECUTIVES

19. <u>What do you think is the maximum length of time that Chairmen, Deputy Chairmen and other senior executives in the nationalised ESI, should normally remain in post</u>. *[tick]*

Time Period	Chairmen	Deputy Chairmen	Senior Executives
Less than 3 years	_____	_____	_____
3 - 5 years	_____	_____	_____
6 - 9 "	_____	_____	_____
10+ "	_____	_____	_____

20. **What, if any, are the advantages and disadvantages of Chairmen and Chief Officers remaining in their posts for ten years or more?**

(a) ADVANTAGES _____

_____

_____

(b) DISADVANTAGES _____

_____

_____

MANAGERIAL ACTIVITIES

21 (a). **Allocation of your time at work** *ie how much of your time is spent on any of the activities listed below, per day and per week [tick]*

		hours per day	hours per week
1.	Telephone . .	____	____
2.	Computer . .	____	____
3.	Writing/drafting .	____	____
4.	Reading: critical & immediate	____	____
5.	Reading: background .	____	____
6.	Dictation . .	____	____
7.	Meetings . .	____	____
8.	Thinking . .	____	____
9.	Travelling . .	____	____
10.	Representational duties*	____	____
11.	Other [specify]_____	____	____
	_____	____	____

21 (b). **Rating the allocation of your time at work.**
[Rate the following according to usefulness, where 5 is the most useful allocation of your time at work, 4 is fairly useful, 3 is average, 2 is not very useful and 1 is the least useful allocation of your time.]

		Rating
1.	Telephone . .	____
2.	Computer . .	____
3.	Writing/drafting .	____
4.	Reading: critical & immediate	____
5.	Reading: background .	____
6.	Dictation . .	____
7.	Meetings . .	____
8.	Thinking . .	____
9.	Travelling . .	____
10.	Representational duties*	____
11.	Other [specify]_____	____
	_____	____

22 (a). **MEETINGS YOU HOLD/ATTEND**. On average, how many hours per week do you spend at meetings, such as the following:

hours per week

a	In office (informal, ad hoc) .	
b	With outstationed managers	
c	With senior H.O. managers	
d	Board meetings	
e	Executive meetings with Chief Officers	
f	With individual managers on specific problems	
g	With groups of managers on specific problems	
h	ESI national meetings with managers .	
i	JCC/DJCC/NJCC	
j	Formal meetings with trade unions	
k	Informal meetings with trade unions .	
l	Internal on privatisation (in your organisation)	
m	External on privatisation (ESI only)	
n	Other privatisation meetings .	
o	Lead meetings outside ESI* [specify]_____	
p	Other meetings outside ESI* [specify]_____	

22 (b). **RATING THE MEETINGS YOU HOLD/ATTEND**.

[Rate from 1 to 5 where 5 is considered to be a very useful meeting, 4 = fairly useful, 3 = average, 2 = not very useful and 1 is the least useful.]

Rating

a	In office (informal, ad hoc) .	
b	With outstationed managers	
c	With senior H.O. managers	
d	Board meetings	
e	Executive meetings with Chief Officers	
f	With individual managers on specific problems	
g	With groups of managers on specific problems	
h	ESI national meetings with managers .	
i	JCC/DJCC/NJCC	
j	Formal meetings with trade unions	
k	Informal meetings with trade unions .	
l	Internal on privatisation (in your organisation)	
m	External on privatisation (ESI only)	
n	Other privatisation meetings .	
o	Lead meetings outside the ESI*[specify]_____	
p	Other meetings outside ESI*[specify]_____	

MANAGERIAL AND LEADERSHIP QUALITIES

23. What qualities do you look for in a manager?
[list below in order of importance to you]

_____

_____

_____

_____

_____

_____

_____

_____

24. What qualities should a good leader have?
[list below in order of importance to you]

_____

_____

_____

_____

_____

_____

_____

SELECTING AND DEVELOPING STAFF

25. Recruitment

(a) Does your organisation have any difficulties in recruiting staff for posts? *[tick]*

YES___ *[continue with (b) and (c) below]*

NO ___ *[go to question 26]*

(b) Specify type(s) of staff it has been difficult to recruit

_____

_____

_____

_____

(c) Why do you think you had difficulties [list]

_____

_____

_____

_____

26. Apart from the national recommendation on management training, in your organisation do you use any of the following techniques for planning for management succession. *[tick for yes]*

[tick]

1. Long-term estimates of future management requirements . ___

2. Short-term surveys of the management position . . ___

3. Organisation charts for management development . . ___

4. Management inventory . . . . ___

5. Organised talent spotting . . . ___

6. Individual plans for those with management potential . ___

7. Individual plans for those with senior management potential ___

8. Named successors . . . . ___

9. Other plans you have *[list]*_____

_____

_____

[If you do have plans for management succession, answer question 27, if not go to question 28.]

27. How do you ensure that plans for management succession are actually being carried out? *[comment below]*

_____

_____

_____

28. **CENTRALISED PLAN FOR MANAGEMENT SUCCESSION IN ESI**

(a) Is there a centralised formal plan for management succession to top management positions in the ESI, in your organisation?

        YES___ *[go to part (b) of this question]*
        NO ___ *[go to question 28e]*

(b) Do you make recommendations to this plan?

        YES___ *[answer parts (c) and (d) to this question]*
        NO ___ *[answer part (e) to this question]*

(c) What criteria do you use in making your selection(s) for recommendation to the central body*[specify below]*

_____

_____

_____

(d) With whom do you discuss the recommendations
    [specify positions and locations of people concerned]

_____

_____

_____

(e) Give reasons for not having a management succession plan

_____

_____

_____

SELECTING MANAGERS FOR POSTS

29. In selecting or approving staff for a managerial position, how do you
    rate the following in terms of importance when making your decision?
*[rate from 1 to 5, where 5 is very important, 4 is fairly important,
3 is average, 2 is not very important, and 1 is not at all important]*

                                                          Rating

    1. Qualifications .   .   ___

    2. Knowledge   .   .   ___

    3. Experience in that work   .   ___

    4. Ability to get on with others   ___

    5. Problem-solving .   .   ___

    6. Ability to motivate staff .   ___

    7. Persistence   .   .   ___

    8. Flexibility   .   .   ___

    9. Age   .   .   .   ___

    10. Experience in other locations   ___

    11. Experience in other boards .   ___

    12. Need for further development   ___

    13. Enthusiasm   .   .   ___

    14. Length of time in previous posts ___

    15. Thinking ability .   .   ___

    16. Humour   .   .   ___

    17. Hobbies/leisure activities .   ___

    18. Their critical abilities   .   ___

    19. Team spirit   .   .   ___

    20. Intelligence   .   .   ___

    21. Innovatory skills.   .   ___

    22. Personal style   .   .   ___

    23. Ambition   .   .   ___

    24. Drive .   .   .   ___

    25. Track record   .   .   ___

    26. Other qualities considered by you *[list]*_____

_____

_____

STRUCTURE OF ESI

30. Regarding the ESI now, how do you rate the following statements
[rate from 1 to 5, where 5 means you strongly agree, 4 you agree, 3 means you neither agree nor disagree, 2 you disagree and 1 means you strongly disagree]

<u>Rating</u>

1. Staff are over qualified   .   ___

2. There are too many managers   .   ___

3. There are too many levels of management   ___

4. There are too many committees   .   ___

5. The line of command should be shorter   ___

6. There are too many rules and procedures   ___

7. There is too much consultation with unions   ___

8. There is too much consultation with staff   ___

9. There is too much consultation generally   ___

31. (a) Do you think that some staff are under-qualified? [tick]

YES ___ [answer part b to this question]

NO ___ [go to question 32]

(b) Which staff [list] _____

_____

_____

_____

PRIVATISATION

32. <u>Rate each of the following statements where</u>
*5 = you strongly agree, 4 = you agree, 3 = you neither agree nor disagree,
2 = you disagree, 1 = you strongly disagree.*

<u>With privatisation there will be</u>:   *Rating*

1. Increased risk taking .   .   ___
2. Penalties for targets not met   .   ___
3. Introduction of performance pay & rewards ___
4. More direct action   .   .   ___
5. More freedom in decision making .   ___
6. Decentralisation of decision making   ___
7. Increased delegation to lower management ___
8. Increased flexibility from staff.   ___
9. Changes in management style   .   ___
10. Less mobility for staff   .   ___
11. Fewer training facilities   .   ___
12. Organisational changes.   .   ___
13. Need for new managerial skills   .   ___
14. Need to buy in managerial skills.   ___
15. Fewer internal meetings   .   ___
16. More meetings with bodies external to ESI ___
17. Less paperwork generated   .   ___
18. Less form filling   .   .   ___
19. Less need for national agreements   ___
20. Loss of synergy*   .   .   ___
21. Weakening of oral communications network ___
22. Change(s) to the ESI's corporate objective___
23. More emphasis on profits   .   ___
24. More cost cutting   .   .   ___
25. Difficulty in maintaining the ESI's
    corporate objective .   .   ___

33. In your view, do managers need qualifications, knowledge and
     experience to work in a privatised organisation, which are different
     from those needed in a nationalised one?
[If yes list below, if no go to question 34]

_____

_____

_____

_____

_____

_____

_____

_____

STRUCTURE FOR PRIVATISATION

34. Give your rating of the proposed structure for the privatised ESI,
     between 1 and 5, *where 5 is a very good structure, 4 is good,
     3 average, 2 poor, and 1 is a very poor structure. [tick]*

VERY POOR	POOR	AVERAGE	GOOD	VERY GOOD
1. ___	2. ___	3. ___	4. ___	5. ___

35. Has your view of the effectiveness of the structure of the ESI
     varied over time.
*[Tick below the comment which most closely represents your view of the ESI at
the time period indicated, ie at that point in your career.]*

Comment on structure	1948-56	1957-66	1967-76	1977-86
VERY GOOD	_____	_____	_____	_____
GOOD	_____	_____	_____	_____
AVERAGE	_____	_____	_____	_____
POOR	_____	_____	_____	_____
VERY POOR	_____	_____	_____	_____

36. Do you think that the effective operation of the ESI has been hindered
     by any influences beyond its control *[tick]*

            YES ___ *[go to question 37]*

            NO ___ *[go to end]*

37. <u>Which, if any of the following have hindered ESI effectiveness?</u>

[tick to indicate which of those listed have hindered ESI effectiveness]

[tick]

1. Electricity Council . .   ___
2. CEGB . .   ___
3. CEGB HQ . .   ___
4. CEGB Divisions .   ___
5. CEGB Nuclear Power Stations   ___
6. CEGB Fossil fuel stations .   ___
7. CEGB Transmission .   ___
8. Area Boards . .   ___
9. Area Boards HQ .   ___
10. Area Boards Divisions/Districts   ___
11. NSHEB . .   ___
12. SSEB . .   ___
13. Government interference .   ___
14. Government direction on pay   ___
15. Government selection of top ESI management   ___
16. Government direction on fuel for power stations   ___
17. Government direction on type of power stations to be built   ___
18. Others *[list]*_____

_____

_____

END.

Thank you for completing this questionnaire.

Please send the completed questionnaire in the addressed envelope provided to:

Margaret Nisbet (Mrs)
Room 4R3
The Electricity Council
30 Millbank
London SW1P 4RD

Tel: 01-834 2333 ext 6165.

Notes on Questionnaire

Question 14 (a)

4. Business Studies: examines organisational activity in its economic, social, political and legal environment. Focusing on the separate disciplines of economics, administration, marketing, accountancy and law and how they are all interrelated in business decision making and the dynamic environment.

10. Business Analysis: includes the techniques or tools which managers can apply in problem solving; and/or as an aid to analysing the results of work produced by others. For example: Discounted cash flow, simulation, theory of games, critical path analysis, linear programming, confidence limits, transportation, significance/hypothesis testing etc.

Question 21 (a) and 21 (b)

Representational duties: when you attend meetings outside your organisation but you are representing your organisation eg meetings with Government, Local Authorities, manufacturers and suppliers etc.

Question 22 (a) and 22 (b)

o. Lead meetings outside ESI: refers to meetings with outside bodies which you have organised and are leading eg with manufacturers, local government etc.

p. Other meetings outside the ESI: refers to meetings you attend because you are a member of another body but not the actual organiser.

Question 32

20. Loss of synergy: In business literature synergy is frequently described as the '2 + 2 = 5' effect to denote the fact that the firm seeks a product-market posture with a combined performance that is greater than the sum of its parts. Here the expression refers to the pre-privatisation combined efforts of the ESI's [generating, distribution and transmission] organisations which are assumed to be greater than the sum of its parts. Post-privatisation, the ESI's performance will be based on competition thus implying that the cooperation experienced during nationalisation will cease to exist, leading to loss of synergy.

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