MINEWORKERS' PENSION SCHEME

ACTUARIAL REVIEW

as at

30 SEPTEMBER 1993

REPORT

by the

GOVERNMENT ACTUARY

June 1994

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1. Introduction

1.1 At the request of the Committee of Management, I have carried out an actuarial review of the Mineworkers' Pension Scheme (MPS) as at 30 September 1993, in accordance with Clause 17 of the Scheme and Rules. The purposes of the review are to investigate the financial condition of the Scheme, and to recommend the future joint rate of contribution to the Scheme. The report on the previous review was carried out as at 30 September 1990.

1.2 This report also discusses the position of the scheme on discontinuance (Section 10) and considers the relationship between the assets and liabilities on the basis prescribed by the Inland Revenue for the maximum permitted tax-exempt funding level (Section 11).

1.3 This report has been prepared in accordance with Guidance Note GN9 issued by the Institute of Actuaries and Faculty of Actuaries.

2. Developments since the 1990 review

2.1 The previous review found that the value placed on the assets of the MPS fund was £1,766 million more than the actuarial liability. The joint standard contribution rate was assessed at 15.35% of salaries. After allowing for the outstanding periods of contribution reductions that were the result of the 1987 review, the disposable surplus was estimated at £1,491 million.

2.2 As a result of the surplus revealed by the 1990 valuation, the Rules of the Mineworkers' Pension Scheme were amended with effect from 1 March 1992. The benefit improvements introduced by these amendments include the following:

(i) The normal retirement age for existing contributors at 1 March 1992 was reduced to 60. The age at which the pensions and lump sums of former contributors become payable was brought forward to 1 March 1992 or age 60 if later.

(ii) Pension benefits for serving members at 1 March 1992 who retire after that date will be based on one sixtieth of pensionable earnings for each year of service after 6 April 1975, instead of one eightieth. Members may choose to take their benefits wholly as pension, or to convert up to 25% of pension to a lump sum at the rate of £9 for £1 a year of pension.

(iii) Members in service on 1 March 1992 received a service credit equal to 25% of their contributory service between 6 April 1975 and 29 February 1992. All pensions due from 1 March 1992 received an extra 8% increase with effect from 28 September 1992, on top of their regular annual increases.

(iv) Serving members may, in future, apply for immediate payment of pension at any age from 50. Pensions paid on early retirement below age 59 are actuarially reduced. There is no reduction on early retirement at age 59.

(v) Lump sums payable on death in service were increased to two years' pensionable earnings. Some lump sum benefit will in future be payable to the widows of former members who die on or after 1 March 1992, if the member contributed to the Scheme after April 1975.

2.3 Appendix A summarises the main provisions of the Scheme following these benefit improvements.

2.4 The standard contribution rate assessed at the 1990 valuation was 15.35% of pensionable earnings and, as a result of the benefit improvements, the joint standard contribution rate increased to 16.09% from 1 March 1992. In fact, no standard contributions from the employer were paid during the inter-valuation period because of recommendations made at previous valuations. It was estimated that the benefit improvements absorbed 70% of the disposable surplus as at 30 September 1990, and that the remaining 30% was sufficient to extend the period of employer's contribution reductions by about 6½ years, including the increase in the standard contribution rate resulting from the benefit improvements effected from 1 March 1992.

2.5 Members' contributions of 5.25% of earnings were increased for those employees who chose to pay additional contributions over the five years commencing on 6 April 1987 to make good the contributions missed while they were on strike. Employers pay matching additional contributions. During the inter-valuation period, the employers also paid additional contributions totalling £365 million as part of their continuing annual payments to meet the cost of benefits payable in respect of members made redundant between March 1981 and March 1987.

2.6 Pensions are normally increased each year in line with the Retail Prices Index (RPI). The increases applied to pensions in payment since the previous valuation have been as follows: 5.8% in September 1991
3.9% in September 1992
1.2% in September 1993

These increases are in addition to those applied as a result of benefit improvements. The minimum pension after 10 or more years' service was £26.13 a week with effect from 1 October 1993.

2.7 Rule 26 provides that the pensions increase shall not exceed the amount sustainable by the Fund without additional contributions. The 1990 Social Security Act includes a provision that pensions earned by service after A-day shall be increased in line with the RPI up to a ceiling of 5% a year. This provision would override Rule 26, but the date of A-day has not yet been announced. Although the provision will only apply to pensions earned by service after A-day, it will not then be possible to use any surplus disclosed at an actuarial review to reduce contributions or improve benefits until past service pensions are also guaranteed to increase in line with the RPI up to a ceiling of 5% a year. In practice, pensions increases have been paid at the full RPI level in the Scheme for many years.

3. Valuation data

3.1 Appendix B summarises the data provided about the MPS membership at 30 September 1993, together with the changes in the MPS membership since the previous valuation.

3.2 The members of MPS who had accrued rights to benefits as at 30 September 1993 include 16,179 contributing members, 170,616 former contributors, and 255,225 pensioners. The comparable numbers at 30 September 1990 were 52,479 contributing members, 195,793 former contributors, and 269,291 pensioners. The large decrease in the number of contributing members (from 10% of total beneficiaries in 1990 to 4% in 1993) emphasises the very mature nature of the Scheme.

3.3 The audited accounts show that the market value of the MPS Fund at 30 September 1993 was £7,528 million. Appendix C summarises the income and expenditure of the Fund during the three years to 30 September 1993. The expenditure on benefits during the three years was very substantially in excess of contribution income and transfer values received by the Fund, by a margin of £1,121 million. This compares with an excess of £325 million during the preceding three years. This has arisen for the following reasons: the number of contributing members has continued to decline, the employers paid no standard contributions during the period (other than in respect of matching strike contributions) and substantial numbers of transfer payments were made from the Fund. Benefit expenditure now exceeds contribution and investment income, requiring the liquidation of some assets.

3.4 Appendix C also summarises the investments of the Fund at 30 September 1993 and their market values. About 80% of the Fund's market value was invested in UK and overseas equities, including the share-holding in the British Investment Trust. The comparable percentage at the previous valuation was 65%.

4. Valuation method

4.1 In order to carry out the review, it is necessary to compare the estimated present values of the Fund's assets and liabilities at the valuation date to establish whether the Fund is in surplus or deficit. A future contribution rate must also be recommended.

4.2 The funding objective is to maintain a fund that is sufficient to secure all the benefits accrued at the date of the review. The Scheme's assets are taken to be the investments in the Fund plus the remaining employers' additional contributions for past redundancies. The accrued benefits comprise pension benefits applicable to retired members, the preserved benefits of early leavers, and the accrued entitlements of members still in service, based on projected final earnings.

4.3 The valuation method chosen to achieve the funding objective is known as the Projected Unit Method. The method has been modified, as in the previous review, by the use of a control period of three years.

4.4 The standard contribution rate is expressed as a percentage of earnings, and is obtained by first calculating the present value of all benefits which will accrue for members in service during the three years following the valuation date, by reference to service during that period and projected final earnings. This value of benefits is then divided by the present value of members' projected earnings in that period. The contribution rate derived by the Projected Unit Method may be expected to change if the age and sex distribution of contributing members changes. For example, the rate is likely to increase if the Scheme is closed to new entrants.

4.5 The actuarial value of accrued benefits is calculated by summing the present value of all benefits accrued at the valuation date (based on projected final earnings for members in service) and is compared with the value placed on the Scheme's assets. The recommended contribution rate, expressed as a percentage of earnings, is obtained by modifying the standard contribution rate to reflect any surplus or deficiency of the assets relative to the actuarial liability.

4.6 The present value of accrued benefits and those accruing over the next three years are based on assumptions about long-term economic conditions (financial assumptions) and the likelihood of events giving rise to benefit payments under the Scheme rules (demographic assumptions). These assumptions are described in the following sections.

4.7 Under the Rules of the Scheme, pensions in payment (in excess of the Guaranteed Minimum Pensions) are increased each year in line with the Retail Prices Increases, provided that the resources of the fund are sufficient. The Committee of Management has again requested that the valuation should be carried out on the assumption that pension increases will fully match RPI.

5. Financial assumptions

5.1 In order to compare the future outgo on benefits which have accrued at the valuation date with the income and other proceeds from the assets, and also to compare future service liabilities with contribution income, all future income and outgo is capitalised at the valuation date by discounting future payments at a suitable rate of interest. The cash flows will occur over a very long period into the future and this must be reflected in the rate of interest chosen. The financial assumptions should, therefore, represent a long-term view of stable conditions, and should not change substantially from one valuation to the next unless there are significant changes in the underlying economic conditions.

5.2 Pensions in payment are reviewed annually in the light of increases in the Retail Price Index. Deferred pensions are increased in line with prices subject to a maximum of 5% a year. Most benefits in respect of active members are related to earnings near to retirement and standard contributions are a percentage of earnings. It is, therefore, necessary to make assumptions about future increases in prices and earnings.

5.3 For the valuation, however, it is the differences between the assumed investment yield and the rates of inflation of prices and earnings that are more important than their absolute values. These net yields have, in the past, been considerably more stable than gross yields because high rates of earnings and price inflation are normally associated with high investment yields. At the previous valuation it was assumed that the investment yield would exceed general increases in earnings by 1½% a year and price increases by 3% a year.

5.4 During the 1980s, the real investment returns from equities were sometimes very high. However, it would not be realistic to assume that the high real rates of return obtainable during the 1980s could continue indefinitely, just as it would have been unrealistic to assume that the very poor real rates of return which were experienced for much of the 1970s would persist. In recent years there has been a very significant reduction in the level of price inflation, and this has been accompanied by a drop in the yields on gilt-edged investments, eg from 11.7% to 7.5% on conventional gilts and from 4.4% to 3.2% on index-linked gilts from September 1990 to September 1993. However, the assumption of a real investment return in excess of prices of 3% a year adopted for the previous two valuations has looked cautious for some time, both in relation to the average return achieved by pension funds over periods spanning both the 1970s and 1980s, and in relation to that obtainable on index-linked British Government Stocks. The yield on index-linked gilts has again risen above 3½% a year, since the valuation date.

5.5 I have discussed the possibility of adopting slightly more optimistic assumptions with the Committee of Management and have ascertained that such a move would be acceptable to them. I have, therefore, decided to increase by ½% a year the assumptions made for real rates of investment return. Accordingly, the assumed investment return in excess of general increases in earnings has been raised from 1½% to 2% a year, and the assumed investment return in excess of price increases has been raised from 3% to 3½% a year.

5.6 Although it is the net yields which determine the capitalised values of most benefits and of standard contributions, a gross investment yield is needed to place a value on Guaranteed Minimum Pensions. This is because pension increases on this part of pension are borne partly or wholly by the State. The appropriate yield is that which is likely to be earned on average on future investments over the very long term, and has been assumed to be 8½% a year, the same as for the previous review.

5.7 The assumptions of an 8½% gross yield, a yield net of price increases of 3½% a year, and a yield net of earnings increases of 2% a year imply a rate of price inflation of about 5% a year, and a rate of earnings growth of about 6½% a year. It is, however, the net yields which are much more important for the valuation.

5.8 A yield assumption is also needed to value the employers' additional contributions in respect of past redundancies. These contributions (currently £100.4 million a year) are due over the next few years and have been discounted at the rate of 8½% a year, the gross valuation rate.

6. Demographic assumptions

6.1 The principal demographic assumptions are

- the probabilities by age that active members will leave the Scheme through normal retirement, retirement on grounds of ill-health, death in service or voluntary withdrawal from service,

- the progression by age of average earnings of active members, over and above the assumed rate of general earnings increases (see Section 5), and

- the mortality rates by age of different categories of pensioners (existing pensioners, deferred pensioners, and active members after retirement).

6.2 Data was supplied on all contributing members, pensioners and deferred pensioners as at the valuation date, and on entrants, retirements, redundancies, deaths in service and voluntary withdrawals during the three years since the previous valuation. This information was used to review the demographic assumptions that were adopted for the previous valuation in the light of recent Scheme experience. As a result, the assumptions used for the previous review were retained or amended as follows:

Age retirement

The assumed retirement age of 59 was retained.

Ill-health retirement

The assumed rates of ill-health retirement were increased above age 35, in the light of the very much higher incidence of retirement on ill-health grounds experienced in the inter-valuation period.

Voluntary withdrawals

The assumed rates of withdrawal were retained.

Mortality

The assumed rates of death in service were retained.

The assumed rates of pensioner mortality after ill-health retirement were reduced at lower ages and increased at higher ages to reflect the experience.

The rates of pensioner mortality after age retirement, and of widows mortality were retained, except to change the year of use in the standard tables from 1990 to 1993.

Progression of earnings with age

The assumed progression of earnings with age was increased below age 34.

6.3 A detailed description of the demographic experience and the assumptions adopted for the current review is contained in Appendix D.

Expenses of administration

6.4 Contributions by British Coal to the Scheme are reduced by such sums as are agreed from time to time by British Coal and the Committee of Management as being fair and reasonable, having regard to the costs to British Coal of the services rendered to the Scheme. The total of such reductions over the three years to 30 September 1993 was £21 million. I have been advised that the total reduction for the three years ending 31 March 1994 is projected to be £20.5 million. The average annual expenses projected to be incurred over the three years to 31 March 1994, after adjusting to price levels in the year to 31 March 1994, are £7.0 million. As at the previous review, the Committee of Management has asked me not to include an allowance for expenses in the standard contribution rate. The provision for expenses has, therefore, been set at the amount on which the investment yield will equal £7 million a year, increasing in line with prices, and on the assumption that the yield obtained on investments net of price increases will be 3½% a year. The provision for expenses calculated in this way is £203 million.

7. Valuation of assets

7.1 The market value at the valuation date of the Fund's investments was £7,528 million. A breakdown of the investments by market value is shown in Appendix C. Market values of the investments, however, are not used in the actuarial valuation because they fluctuate according to short-term market factors. Instead, the investments are valued by discounting the projected future income from the investments using assumptions that are consistent with those used to value the Scheme's liabilities. The assumptions are, therefore, based on a long-term view of future financial conditions. In this way, the actuarial value placed on the Fund's assets is comparable with the value placed on the liabilities, leading to greater stability between successive valuations.

7.2 At the previous valuation, each category of investment was valued separately. Fixed interest securities and the property investments were valued on the assumption that they were replaced by British Government index-linked stocks. Overseas equities and the holding in British Investment Trust plc were valued on the same ratio to market value as UK equities. As a result, the overall value placed on the investments was determined mainly by the methods adopted for valuing British Government index-linked stocks and UK equities.

7.3 For this review, the process has been simplified by using a "standardised portfolio" approach. It has been assumed that 25% of the Fund's total investments, by market value can be represented by a notional index-linked British Government security of term 20 years, bearing a coupon of 2½% a year payable half yearly with a redemption yield on the valuation date equal to the yield on the FT - Actuaries Index of index-linked British Government stocks for terms of over 5 years on the 5% inflation assumption. The remainder of the standardised portfolio (75% of the investments by market value) is assumed to consist of a portfolio of UK equities distributed in the same way as the FT - Actuaries All Share Index and with a gross dividend yield equal to the yield on this index at the valuation date. This method of valuation avoids spurious distortions arising from the particular mix of assets held at 30 September 1993, which may differ, for short-term tactical reasons, from the normal long-term holdings.

7.4 The main assumption made in capitalising the future stream of benefit outgo is that the investment yield net of price increases is 3½% a year. To be consistent, the assumed holding of the notional index-linked British Government security has been valued by capitalising the income and redemption amounts at 3½% a year net of price increases. The dividend income from the portfolio of UK equities was valued by discounting in perpetuity the stream of income at a gross rate of 8½%, but with allowance for assumed growth in the level of dividends at about 4% a year. This is equivalent to discounting the dividend income at a net rate of 4½% a year. Discounting the equity proceeds at 4½% is equivalent to assuming that the dividend income will increase at about 1% a year less than prices, the same assumption as used at the 1990 valuation.

7.5 The value placed on the investments for the purpose of this review is £6,718 million, compared with the market value of £7,528 million. Although the assessed actuarial value is lower than the market value, it is consistent with the method and assumptions used for valuing the liabilities.

7.6 The value of the additional contributions, discounted at 8½%, in respect of redundancies prior to March 1987 is £164 million.

8. Results of the review

8.1 The joint standard contribution rate under the Projected Unit Method, calculated using the method and assumptions described in the earlier Sections, is 15.4% of salaries.

8.2 The value placed on the assets is compared with the value of the Scheme liabilities, calculated using the method and assumptions described in the earlier Sections, in the Valuation Statement below.

Valuation Statement as at 30 September 1993

Value as at 30 September 1993 in respect of	**£ million**
Current pensioners	3,442
Deferred pensioners	1,560
Active members for service up to 30 September 1993	864
Provision for future costs of administration for pensioners and deferred pensioners	203
Actuarial liability	6,069
Employers' additional contributions for redundancies before 31 March 1987	164
Net Liability	5,905
Scheme investments	6,718
Excess of assets over liabilities	813

9. Discussion of results

9.1 The Valuation Statement shows that, as at 30 September 1993, the assets of the Scheme exceed the actuarial liability in respect of past service by £813 million. The liability shown in the Valuation Statement is for past service only. For future service benefits, standard contributions at the rate of 15.4% would be required, before taking account of the position in relation to past service.

9.2 As a result of the agreed reductions in employers' future contributions under the arrangements to dispose of the surplus at the previous review, only the members' standard contributions will be received in respect of future service benefits until after the year 2000. Under these arrangements, the employers' contribution holiday is due to continue until 29 October 2000 (British Coal) or 28 October 2001 (other employers), and joint contributions are due to be reduced by 1.09% of the earnings after 28 October 2000 of serving members on 1 March 1992. The value of these agreed reductions in the employers' standard contributions has a capitalised value as at 30 September 1993 of £228 million, calculated on the basis of the joint standard contribution rate of 15.4% assessed at this valuation. If the value of these contribution reductions is offset against the surplus at 30 September 1993, the residual amount of surplus is £585 million.

9.3 This assessment assumes that total earnings of contributing members will remain constant except for the effect of pay awards at the rate assumed. It is also assumed that 97% of the total earnings relate to British Coal employees and the balance to employees of other employers.

9.4 The decrease in the joint standard contribution rate from 16.09% to 15.4% reflects an increase in the present value of the benefits accruing in the three years following the valuation date, offset by a decrease in the rate as a result of the changed financial assumptions (see paragraph 5.5). The main reasons for the increase are an increase in the average age of active members, and the changes to the demographic assumptions (especially the higher ill-health retirement assumed), as described in Appendix D.

9.5 The result of the present review is not directly comparable with that of the previous review, mainly because of the benefit improvements described in Section 2. The surplus disclosed at the previous valuation was distributed partly by benefit improvements and partly by the contribution reductions described in paragraph 9.2. The surplus disclosed at the present review is an indication of the favourable experience of the Fund during the three years to 30 September 1993. This overall favourable experience, however, is a result of several factors, some of which have increased, and others decreased, the surplus since the previous valuation.

9.6 One factor which has not been particularly favourable is that the margin between the rate of increase in the value placed on the Scheme's assets and the rate of increase in prices was lower than the 3% a year assumed at the previous valuation. This reflects the very low dividend growth on equities between 1990 and 1993, as a result of the economic recession. The value of the Scheme assets increased by about 12% over the 3 years to 30 September 1993, allowing for the excess of expenditure over contribution income during this period. Those parts of pensions which were increased in line with prices rose by 11.2% between 1990 and 1993, according to the increases shown in paragraph 2.6. The value of assets, therefore, increased by only about 1% in excess of price increases, compared with the 3% a year assumed at the previous valuation.

9.7 A principal cause of surplus was the large number of members at relatively young ages whose pensionable service was prematurely terminated in the three years since 30 September 1990. Such members receive the same benefits from the Scheme as if they had left service voluntarily. Redundancies at young ages generally give rise to surplus because the value of the deferred benefits is lower than the value of the benefits to which members would have been entitled had their membership of the Scheme not been terminated. In addition, the fall in the number of contributing members in the three years since the previous review has reduced the value of the contribution reductions, as assessed at the previous review, and when surplus was disposed following the previous review.

9.8 The changes in actuarial assumptions adopted for the current review have affected the valuation result in different ways. Some of the demographic changes, especially the assumptions about ill-health retirement, have increased the liability for active members (by a little over 5%), and the changes made for pensioners and deferred pensioners have increased the liability by a marginal extent. Other changes, such as the higher real investment return assumed, the modification to the expenses provision and the slightly different approach to the asset valuation, have had a small favourable impact on the valuation result.

10. Current funding level

10.1 The results discussed in Section 9 demonstrate that the assets held in the Fund were more than sufficient to meet the liabilities on an ongoing basis as at 30 September 1993. It is also necessary to investigate the accrued solvency position, as if the Scheme had discontinued at 30 September 1993, with cessation of benefit accrual and salary linking.

10.2 In carrying out this investigation, the same method and assumptions have been adopted as were used for Section 1 of the Actuarial Statement as at 30 September 1993 required under Regulation 8 of the Occupational Pension Schemes (Disclosure of Information) Regulations 1986. The market value of the Scheme's assets as at 30 September 1993 was compared with the market value at the same date of a portfolio of index-linked and fixed interest British Government stocks. The portfolio was chosen so that, if all assumptions were realised, the interest and redemption proceeds would match, as far as is practicable, the liabilities of the Scheme if it had discontinued as at 30 September 1993. These liabilities are those in respect of pensioners and deferred pensioners up to 30 September 1993, on the basis that the service of active members terminated on that date, together with expenses of £7 million a year at 1993-94 prices. The demographic assumptions used to estimate these liabilities are the same as those set out in Appendix D.

10.3 On the basis described above, the assets of the Scheme as at 30 September 1993 fully cover its liabilities as at that date. The value of the liabilities estimated in this way may, however, be less than the cost required to secure the liabilities of the Scheme if it were to wind up as at 30 September 1993, and if the benefits were to be purchased from an insurance company or some other pension provider. The size of the MPS liabilities is so large that it would be very difficult for the commercial market to absorb the wind-up liabilities.

11. Statutory Valuation

11.1 The Finance Act 1986 (now consolidated into the Income and Corporation Taxes Act 1988) requires pension schemes approved by the Pension Schemes Office to assess whether the assets held exceed the maximum level of tax-exempt funding permitted under Inland Revenue requirements. The values of assets and liabilities used to make this assessment must be calculated on the actuarial method and assumptions laid down in Regulations, principally the Pension Scheme Surpluses (Valuation) Regulations 1987 (SI 1987/412). Any surplus in excess of 105% of the liabilities, calculated in accordance with the Regulations, must be eliminated by one or more actions approved by the Inland Revenue. If no such action is taken to reduce an excessive surplus, the scheme would suffer a tax liability on the portion of assets held in excess of the prescribed value of the liabilities.

11.2 The value of the assets of the Mineworkers' Pension Scheme as at 30 September 1993 did not exceed 105% of the value of the liabilities of the Scheme, calculated in accordance with the Regulations. A statement certifying this result, in the form prescribed by the Inland Revenue, has been provided to the Scheme administrator.

12. Conclusion

12.1 The joint standard contribution rate is assessed at 15.4% of earnings from 1 October 1993. With contributions at this rate, and assuming that British Coal's additional contributions for redundancies occurring on or before 31 March 1987 are continued, there is a surplus of £813 million. These are the determinations for the total of the members' normal contributions and the employers' standard contributions to the Scheme, and for the surplus on the assumptions stated, which the Actuary is required to make under Clause 17(2) of the Scheme Rules.

12.2 After allowing for the continuation of the employers' contribution reductions under the arrangements to dispose of the surplus disclosed at the previous review, the excess of assets over liabilities is reduced to £585 million. The available surplus may be used in a number of different ways, including benefit improvements, or contribution reductions.

C D DAYKIN FIA
Government Actuary
16 June 1994

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Appendix A

SUMMARY OF THE MAIN PROVISIONS OF THE SCHEME

The main provisions of the Mineworkers' Pension Scheme are set out in the Scheme Report and Accounts, and are summarised below.

Membership and Contributions

Membership of the Scheme is voluntary. Those eligible for membership must be employed by British Coal, a subsidiary of British Coal or a Small Mine Licensee, for 16 hours or more per week in a grade which does not qualify them for membership of the British Coal Staff Superannuation Scheme.

Members contribute 5.25% of their earnings to the Fund. The Mineworkers' Pension Scheme is contracted-out of the State Earnings Related Pension Scheme (SERPS).

Calculation of benefits

The Scheme provides a pension equal to 1/60th of the member's pensionable earnings for each year of service after 6 April 1975, with the option of converting up to 25% of annual pension into a tax free lump sum at the rate of £9 for every £1 of pension converted.

Pensionable earnings, on which the benefit calculations are based, are the weekly average of the best three consecutive years' gross taxable earnings revalued in line with pensions increases during the last 13 consecutive years of Scheme membership. For service prior to 6 April 1975 a flat rate amount is payable.

Retirement

The Scheme's normal retirement age was equalised at 60 for both men and women, with effect from 1 March 1992.

Early Retirement

The Scheme provides for early retirement on full earned pension at age 59. Members in service can apply to retire at any age from 50 with immediate payment of benefits. Pensions for members retiring between the ages of 50 and 58 are reduced to reflect the cost of early payment. Members retiring at age 59 or over have the option of taking a larger Scheme pension until reaching State Pension Age with a corresponding reduction after that time.

Ill-Health Retirement

Members may retire at any time with immediate benefits (at the discretion of the Committee of Management if the member has less than 5 years' service) based on actual service and pensionable earnings at the time of leaving service.

Early Leavers

Members who leave the Scheme before their pensions have become payable may have their benefits preserved in the Scheme and paid at age 60.

Alternatively, members may choose to have the cash equivalent of their benefits either transferred to a new employer's contracted-out pension scheme or, for leavers since 1 January 1986, to any other approved pension arrangement of their choice.

Members' preserved benefits are increased each year in line with changes in the Retail Prices Index subject to a maximum of 5% a year.

Members with less than 2 years' Scheme service are entitled to a refund of contributions.

Family benefits

The widow of a member who dies, either in service or after retirement, will be paid a pension amounting to two-thirds of the member's own pension at the date of death. On death in service, an additional tax-free lump sum is paid equal to two years' pensionable earnings.

A lump sum of three times the member's annual pension is payable to the widow or the estate of a former member who dies before becoming entitled to payment of his benefit.

Pension payments are guaranteed for five years for members who retire on grounds of age or ill-health or for those who take optional early retirement with immediate benefits. If a member dies within the guarantee period the balance of his 5 years pension is paid in a tax-free lump sum to his widow, or in the event that there is no widow, to his estate.

The Committee of Management have discretion to pay the widow's benefits to someone who had been living with the member as his wife, or had the care of any of his children, or, although an adult, was financially dependent on him (e.g a sister, mother, etc.).

A pension is paid for each child up to the age of 16, or age 21 if the child is continuing in full-time education or training, and may be awarded at any age and be payable for life if the child is permanently incapable of self-support.

Pension Increases

Pensions in payment (other than flat-rate pensions) are increased annually in line with the Retail Prices Index.

Appendix B:

MEMBERSHIP AS AT 30 SEPTEMBER 1993

1. The number of contributing members has fallen by 69% since the previous valuation, from about 52,500 at 30 September 1990 to 16,179 at 30 September 1993. Table 1 analyses the change in the number of active members during the three years since the date of the previous valuation.

Table 1:

CHANGES IN ACTIVE MEMBERSHIP DURING THE PERIOD 30 SEPTEMBER 1990 TO 30 SEPTEMBER 1993

Numbers of contributing members at 30 September 1990		52,465
New entrants (including re-entrants, re-employed pensioners, and transfers from the Staff Scheme)		2,337
Age retirements and early retirements from age 59	365	
Voluntary early retirements	1,927	
Redundants over 60 with immediate pensions	1	
Redundants (generally over 55) with index-linked deferred pensions	411	
Other redundants (generally under 55) with deferred pensions	31,458	
Ill-health retirements	1,987	
Deaths in service	121	
Members leaving service voluntarily	891	
Transfers to the Staff Scheme	891	
Members leaving the scheme while remaining in service (of whom 351 subsequently left service before 30.9.93)	571	
		38,623
Numbers of contributing members at 30 September 1993		16,179

2. The number of contributing members at 30 September 1990 shown in Table 1 has been derived from the number at 30 September 1993 and the recorded entrants and exits between the two dates. It is 14 less than the number of contributing members at 30 September 1990 shown in the previous valuation report.

3. Members' benefits depend on their earnings over three consecutive tax years during their last 13 years of service. On the basis of analyses of tax-year earnings of members who contributed throughout the tax year, average weekly earnings at November 1992 pay rates were about £376. This is 11½% higher than the earnings at November 1990 pay rates which were used in the previous valuation, and reflects an average annual increase in earnings of approximately 5½%.

4. The number of pensioners has fallen by approximately 5% since the previous valuation, from about 269,000 at 30 September 1990 to 255,225 at 30 September 1993. The numbers of pensioners on 30 September 1993 and their total pensions at that date are shown in Table 2. These amounts include the increase of 1.2% granted with effect from 27 September 1993.

Table 2:

NUMBERS AND AMOUNTS OF PENSIONS IN PAYMENT AS AT 30 SEPTEMBER 1993

	Number of pensioners	Total pension (£pw)
Age and voluntary early retirement pensioners (categories A, G, J)	31,265	761,837
Redundancy pensioners (K)	80,072	3,120,337
Ill-health pensioners (B, H)	23,778	652,960
Other early leavers awarded pensions deferred to normal retirement age (D, C)	24,332	28,582
Widows (E, I)	95,778	1,470,356
All pensions in payment	255,225	6,034,072

5. The figures in Table 2 for pensioners who were early leavers include pensioners who were made redundant below age 55, but who were not awarded an immediate scheme pension. Table 2 excludes 2,938 pensions in payment at 30 September 1993 in respect of children. The average weekly pension at 30 September 1993 was £23.64, which is approximately 27% higher than the average weekly pension at 30 September 1990. About 8% of this increase is estimated to be the result of benefit improvements following the 1990 valuation.

6. Table 3 analyses the change in the number of pensioners during the three years since the date of the previous valuation.

Table 3:

CHANGES IN NUMBERS OF PENSIONERS DURING THE PERIOD 30 SEPTEMBER 1990 TO 30 SEPTEMBER 1993

Numbers of pensioners at 30 September 1990		269,844
New awards of pension		32,464
Deaths of pensioners	47,081	
Re-employed pensioners	2	
		47,083
Numbers of pensioners at 30 September 1993		255,225

7. The number of pensioners at 30 September 1990 shown in Table 3 has been derived from the number at 30 September 1993 and the recorded entrants and exits between the two dates. It is 553 more than the number of pensioners at 30 September 1990 shown in the previous valuation report.

8. The number of <u>former contributors</u> with entitlement to MPS benefits, but not yet on pension, has fallen by 13% since the previous valuation, from about 196,000 at 30 September 1990 to 170,616 at 30 September 1993. The numbers of former contributors with entitlement to MPS benefits on 30 September 1993 are shown in Table 4.

Table 4:

NUMBERS OF FORMER CONTRIBUTORS WITH ENTITLEMENT TO MPS BENEFITS AS AT 30 SEPTEMBER 1993

	Number of former contributors	Total deferred pension (£pw)
Former contributors who transferred to the Staff Scheme before 6 April 1978	7,656	153,421
Former contributors who left under the Voluntary Early Retirement Scheme	11	577
Former contributors who were made redundant since 30 March 1987	887	40,256
Former contributors who left before 6 April 1975	80,630	29,493
Former contributors who left between 6 April 1975 and 31 December 1985	43,318	801,700
Former contributors who left after 31 December 1985	38,114	2,265,367
All former contributors with entitlement to MPS benefits as at 30 September 1993	170,616	3,290,814

9. The number of former contributors with entitlement to benefits has fallen, despite the fall in the number of contributing members. This is mainly because almost 32,000 members who left service since 31 December 1985 have exercised their statutory right to require the scheme to pay a cash equivalent transfer value to another approved pension arrangement since the previous valuation.

Appendix C

REVENUE ACCOUNT FOR THE PERIOD 30 SEPTEMBER 1990 TO 30 SEPTEMBER 1993

		£ million
Balance of Fund at 30 September 1990 at market value		5,550
INCOME		
Members' contributions	109	
Employers' standard contributions	3	
Employers' additional contributions	365	
Employers' expense reduction	(21)	
Transfer values received	17	
Investment income	982	
		1,455
Net appreciation in the market value of investments		2,117
EXPENDITURE		9,122
Pensions	647	
Lump sums	84	
Family benefits	228	
Withdrawals and transfer values paid	635	
		1,594
Balance of Fund at 30 September 1993 at market value		7,528

Appendix C (continued):

INVESTMENTS AT MARKET PRICES

	£ million	%
Ordinary shares : UK : Overseas	5,706	76
British Investment Trust	290	4
Property	606	8
Fixed-interest stocks	541	7
Index-linked stocks	192	3
Cash	166	2
Net current assets and other assets	27	0
	7,528	100

Appendix D:

DEMOGRAPHIC ASSUMPTIONS

The demographic assumptions that were adopted for the previous review were examined in the light of the experience of MPS members in the three years preceding the valuation date.

Normal retirement

Normal retirement age is 60. Under Rule 14B of the Mineworkers' Pension Scheme, however, members in service may retire at age 59 without reduction of benefits. Few members retired at higher ages during the three years to 30 September 1993. The assumption that members who are still in service at age 59 will retire immediately at that age has therefore been retained.

No allowance has been made for any redundancies after the valuation date. The pensions of members made redundant at ages lower than the age at which it has been assumed that members still contributing will retire (age 59) are deferred to normal retirement age, and no extra service is credited. Those under age 55 receive the same benefits from the fund as members leaving service voluntarily.

Ill-health retirement

The number of ill-health retirements above age 35 was significantly higher than expected on the assumptions adopted at the previous review. The rates above this age have therefore been increased to reflect this experience.

Voluntary withdrawal

The proportion of members leaving service voluntarily in the three years to 30 September 1993 was generally lower than expected on the assumptions adopted at the previous review, though this experience was no doubt affected by the large number of redundancies which occured during the period. Accordingly, the assumptions adopted at the previous valuation have been retained.

Death in service

The number of deaths of members in service is too small to compare reliably with the assumptions adopted at the previous valuation, but the experience was broadly in accord with those assumptions. The assumptions adopted at the previous valuation have therefore been retained.

Commutation

Since 1 March 1992, members have had the option at retirement to commute up to 25% of their annual pension into a tax-free lump. On the basis of information about retirements between March 1992 and September 1993, it has been assumed that 80% of new pensioners will opt to commute 25% of their pensions, giving an effective commutation percentage of 20%.

Progression of earnings with age

Pensions are based on earnings in a three year period during the last thirteen complete tax years of membership. The progression of earnings with age which was adopted for the valuation is shown below for sample ages. This was based on the average earnings for the tax years 1990-93 for members of the Scheme who were members throughout the years in question. The scale rises to a peak at age 34, at a slightly greater rate than assumed at the previous review, and then declines gradually with age.

Age	Salary index
20	79
25	95
30	108
35	112
40	111
45	108
50	105
55	97

The assumed progression of earnings with age makes no allowance for pay rises as a consequence of inflation, which are discussed in Section 5.

Some members' average earnings in the last three complete tax years will be lower than in an earlier three year period during the previous thirteen years, after revaluation in line with pension increases. To allow for this, the benefits of those assumed to retire on attaining age 59 have been calculated on the basis of their earnings in the last three complete tax years, as though the progression of their earnings with age is the average for all members, and then increased by 4%. This allowance is the same as at the previous review.

Mortality in retirement

Revised mortality assumptions were adopted at the previous review. They were based on new standard tables of mortality published jointly by the Institute of Actuaries and Faculty of Actuaries. These tables were derived from the experience of pensioners in insured schemes during 1979-82. The tabulated rates of mortality are based on pensioners deaths (rather than on amounts of pension ceasing), and are known as PML80 for male pensioners and WL80 for widows.

Comparisons were made between the numbers of deaths of MPS pensioners in the three years to 30 September 1993 and the numbers of deaths expected according to the new assumptions adopted at the previous review.

Age retirement

For mortality after age retirement, the adjustments to the standard table PML80 which were made at the previous review were found to match the recent experience. The previous assumptions for mortality after age retirement were therefore retained. Existing pensioners aged 65 or over are assumed to experience rates of mortality in accordance with the standard table PML80(U=1993)x+2, with minor adjustments to reflect the heavier mortality expected at the very high ages. Existing pensioners aged less than 65 are assumed to experience rates of mortality in accordance with the standard table PML80(C=1993)x+1. Existing contributing members and future contributors who are assumed to retire at age 59 are assumed to experience rates of mortality in accordance with the standard table PML80(C=1993)x, when they become pensioners.

Deferred pensioners with index-linked pensions, most of whom are over 55, are assumed to experience the same mortality rates as existing pensioners aged less than 65 who retired on grounds of age or redundancy. The remaining deferred pensions, most of which (by amount) are payable to former contributors aged less than 55, are assumed to experience the same mortality rates as assumed for existing contributing members when they become pensioners.

Incapacity retirement

The assumed rates of mortality after incapacity retirement adopted at the previous review were heavier than those for mortality after age retirement. However, at high ages, the previous assumptions were found to be somewhat lighter than the recent experience. As a result of this comparison, rates of mortality assumed for existing incapacity pensioners aged 65 or over have been based on the standard table PML80(U=1993)x+2, but adjusted to reflect the additional mortality expected for ill-health retirement. All younger, and future, incapacity pensioners are assumed to experience rates of mortality at age 65 and above in accordance with the standard table PML80(C=1993)x+1, with the same adjustments to reflect the additional mortality expected for ill-health retirement cases.

Existing incapacity pensioners aged less than 65 are assumed to experience rates of mortality in accordance with the standard table PML80(C=1993)x+8 up to age 64. Existing contributing members and future contributors who retire on incapacity grounds are assumed to experience rates of mortality up to age 64 in accordance with the standard table PML80(C=1993)x+7, when they become incapacity pensioners.

Widows

For the mortality of widows, the adjustments to the standard table WL80 which were made at the previous review were found to match the recent experience. The previous assumptions for the mortality of widows were therefore retained. Existing widows aged 65 or over are assumed to experience rates of mortality in accordance with the standard table WL80(U=1993)x+2, with further adjustments to reflect the lighter mortality expected at high ages. Existing widows aged less than 65 are assumed to experience rates of mortality in accordance with the standard table WL80(C=1993)x+1. Future widows and contingent widows are assumed to experience rates of mortality in accordance with the standard table WL80(C=1993)x, when they become widows.

Other assumptions

Other assumptions adopted for the previous review were retained. In particular, the assumptions adopted at the previous review for the proportions of members who will be succeeded by widows with entitlement to benefits, and their average age differences, have been retained.