ALSTOM Pension Scheme

Report on the actuarial valuation as at 5 April 2006

Prepared by:

Ian Skinner
Watson Wyatt Limited
(Actuaries & Consultants)
5 April 2007

Watson Wyatt
Worldwide

ALSTOM Pension Scheme

Report on the actuarial valuation as at 5 April 2006

To the Trustee of the ALSTOM Pension Scheme and to ALSTOM Limited:

I have written this report for the Trustee of the ALSTOM Pension Scheme ("the Scheme") and ALSTOM Limited (the Company) as required under General Rule 22 of the Consolidated Trust Deed and Rules dated 8 June 2005 and, more generally, under the provisions of the Pensions Act 2004.

The provisions of General Rule 22 of the Consolidated Trust Deed and Rules require me to report to the Trustee and to the Company on the financial position of the Scheme and to make such recommendations as I think fit. Both the Trustee and the Company have an active interest in the valuation process and, as required by General Rule 22.1, my Report is submitted to both parties.

The Report has been prepared in accordance with the Professional Guidance Note "GN9: Funding Defined Benefits – Presentation of Actuarial Advice" published by the Institute of Actuaries and the Faculty of Actuaries, and current at the date of signing.

Watson Wyatt Worldwide

1 Summary of results

1.1 The main purpose of this actuarial valuation is to examine the financial position of the Scheme relative to its statutory funding objective, as required under the Pensions Act 2004, and hence to determine an appropriate level of contributions to be paid in the future.

Ongoing assessment

1.2 On the methods and assumptions set out in the Statement of Funding Principles dated 5 April 2007 the accumulated assets of the Scheme as at the valuation date represented 85% of the Scheme's Technical Provisions in respect of past service benefits; this corresponded to a funding deficit of £227 million.

1.3 The corresponding position in the previous valuation, which I made as at 5 April 2003, was that the assets then held covered 70% of the benefits for service to that date, on the basis of the assumptions adopted at that time; this corresponded to a funding deficit of £406 million.

1.4 The main reason for the improvement in the past service funding position is the investment return achieved on the Scheme's assets, which has been in excess of the discount rate assumed in the valuation of the past service liabilities.

Future accrual of benefit

1.5 In respect of the future accrual of benefits and the provision of death-in-service benefits relating to their active members the Employers will pay:

- For the year commencing 6 April 2006: 12.5% of active members' Pensionable Earnings
- For the years commencing on or after 6 April 2007: 13.0% of active members' Pensionable Earnings

1.6 Members will pay contributions according to the level of accrual they have selected under the 2006 Section – 4.0% of Pensionable Earnings for an 85ths level of accrual, 5.5% of Pensionable Earnings for a 75ths level of accrual, and 7.0% of Pensionable Earnings for a 65ths level of accrual. Member AVCs are paid in addition.

Expenses

1.7 In respect of Scheme expenses the Company will pay to the Scheme the cost of Pension Protection Fund ('PPF') levies, at least 7 days prior to the deadline for the Scheme to pay the PPF, as imposed by the PPF Board. In addition, the Company will meet the following costs directly by offsetting them against invoices otherwise chargeable to the Scheme:

- the cost of the Trustee's indemnity insurance

- expenses of £450,000 for the year beginning 6 April 2006, increasing each subsequent Scheme Year in line with the pension increase given for the 2006 Section as at 1 May in that year ignoring, in all years, any capping at 2.5% per annum.

Deficit reduction contributions

1.8 In respect of the shortfall in funding, in accordance with the Recovery Plan dated 5 April 2007 the Company will pay:

- For the year commencing 6 April 2006: £23.1 million payable in three monthly instalments of £1.75 million, one instalment of £2.45 million and eight instalments of £1.925 million, payable in the calendar months April 2006 to March 2007, respectively.

- For the nine Scheme Years commencing 6 April 2007: annual contributions, of one ninth of the shortfall as at 31 March 2007 using the 31 March 2007 Accounting Assumptions. The deficit will be reviewed as at each subsequent 31 March. If the deficit (calculated as agreed on the Accounting Assumptions) is within the corridor of 20% below or 15% above the expected deficit for a particular Scheme Year then the extra annual contribution will be that as at 31 March 2007. If the deficit is outside the corridor for any specific Scheme Year, the Company and the Trustee agree to initiate new discussions on the funding of the Scheme.

Schedule of Contributions

1.9 In accordance with the above, the Trustee and the Company have agreed that the Company will pay contributions as summarised above and set out in the Schedule of Contributions dated 5 April 2007:

Solvency assessment

1.10 If the Scheme had been discontinued at 5 April 2006 and had then been wound up, there would have been insufficient assets to buy out the accrued benefits through the purchase of annuity policies with an insurer. The discontinuance funding level (or *solvency* position) for the Scheme as at 5 April 2006, on the assumptions specified in Section 4, is approximately 62%. In practice, should the Scheme be discontinued, the Trustee may well continue to run the Scheme, at least for some years, as a closed fund.

Next actuarial valuation

1.11 The financial position of the Scheme and the level of contributions required will be reviewed annually as described above and at the next actuarial valuation which is expected to be carried out as at 5 April 2009.

2 Background to the valuation

Reasons for carrying out an actuarial valuation

2.1 There are a number of reasons for making an actuarial valuation, quite apart from the requirement under the Trust Deed to provide a valuation at least once every three years, subject to statutory requirements. The main ones are:

- to advise the Trustee and the Company on the financial position of the Scheme relative to the statutory funding objective as required by Section 224 of the Pensions Act 2004, and so determine an appropriate level of future contributions to be paid by the Company;
- to examine whether the Scheme would have adequate resources to meet its accrued liabilities if it were discontinued;
- to provide the statutory certificate required under Section 225 of the Pensions Act 2004, certifying the calculation of the Scheme's technical provisions.

Previous valuation

2.2 The previous valuation of the Scheme, which I made as at 5 April 2003, disclosed a past service shortfall on an ongoing basis of £406 million. This meant that the Scheme's assets of £936 million (which included an adjustment for transactions outstanding at the date of that valuation) were expected to cover 70% of the benefits for service to 5 April 2003.

2.3 In addition, on the long-term assumptions adopted, I calculated that the Company contribution required to fund future benefits after 5 April 2003 was 13.6% of members' Pensionable Earnings less the amounts payable by the members. Administration expenses (then running at around £2 million per annum) were payable in addition.

2.4 At the time of the last valuation, the employers' contributions to be paid were determined by the Company under Clause 22 of the Trust Deed in force at the time, subject to the minimum contributions requirements of the Minimum Funding Requirement. Taking account of the favourable investment returns that had been earned between the previous valuation date and the date that I signed my report, and an expectation that further investment returns would arise which would be above the relatively prudent assumptions made within the valuation, the Company determined that employer contributions would be paid as follows (all subject to review based on future actuarial valuations):

- 8% of members' Pensionable Earnings for the Main Section and Retirement Capital Plan, with separate rates for the smaller sections (which are of much less overall financial significance) as set out in my report
- actual administration expenses incurred, for the Scheme year beginning 6 April 2004 only

- the cost of any augmentations required by the Company and agreed by the Trustee
- £13.7 million per annum (payable in equal monthly instalments) commencing in the Scheme year beginning 6 April 2005

2.5 An agreement was entered into between the Trustee, the Company and ALSTOM Holdings, dated 2 April 2004, which covered investment strategy and funding.

2.6 Appendix D sets out the contributions actually paid to the Scheme over the inter-valuation period.

Legislative changes and other developments

2.7 This is the first actuarial valuation carried out with an effective date after 22 September 2005, and is consequently subject to the requirements of the Pensions Act 2004 and associated Regulations (including the Codes of Practice issued by the Pensions Regulator). A summary of these requirements is provided in Appendix E along with a summary of other relevant legislative developments since 5 April 2003.

Scheme benefits valued

2.8 I have valued the benefits in respect of past service as set out in the Consolidated Trust Deed and Rules dated 8 June 2005. Benefits accrued after 5 April 2006 are subject to a new benefit structure under the 2006 Section, as set out in a Deed of Amendment dated 5 April 2006.

2.9 Members in pensionable service as at 6 April 2006 have been given the option to receive a service credit in the 2006 Section as an alternative to their deferred benefits based upon service to 5 April 2006. In calculating the Technical Provisions, we have valued their deferred benefits assuming that they ceased service at the valuation date. Our valuation calculations have assumed, as we believe is the case, that the terms offered for these service credits are broadly cost-neutral to the alternative deferred pension under the pre-6 April 2006 scale of benefits. A summary of the main benefits and provisions applying to active members (for both pre-6 April 2006 and post-5 April 2006 service) is shown in Appendix A.

Membership data

2.10 In order to carry out the present valuation, I have obtained detailed information regarding the current membership of the Scheme from the records held by the ALSTOM pension department. A summary of the data supplied and used to estimate the future benefits payable from the Scheme is given in Appendix B.

Financial transactions

2.11 I have been provided with audited accounts for the Scheme for the years ending 5 April 2004, 5 April 2005 and 5 April 2006. The transactions of the Scheme and the change in the market value of its assets are summarised in Appendix C. This information is presented as a consolidated revenue account drawn from the accounts of the Scheme over the period of three years from 5 April 2003.

Assets

2.12 The audited asset statement in the latest accounts shows that the market value of the Scheme's assets (including AVCs held with external providers) at the valuation date was £1,327.4 million, including net current liabilities of £3.7 million. The corresponding market value of assets at the previous valuation date was £899.6 million. A breakdown of the Scheme's invested assets into the major investment categories is shown in Appendix B.

Financial assumptions

2.13 The financial assumptions used to determine the funding results set out in Section 3 of this Report are specified in the Statement of Funding Principles. The financial assumptions are used to estimate the projected amount of the benefits becoming payable and the likely proceeds from investment of the Scheme's assets. A summary of the assumptions adopted to determine the Technical Provisions at this valuation and those used in the 2003 valuation of the Scheme is shown below, both in nominal terms and in real terms, (relative to the assumed rate of price inflation).

	2003 assumptions		**2006 assumptions**	
	Nominal % pa	**Real % pa**	**Nominal % pa**	**Real % pa**
Price inflation (RPI)	2.3	-	2.5	-
Discount value	5.6	3.2	5.0	2.4
Salary increases	3.8	1.5	3.5	1.0
Pension increases*	2.2	(0.1)	2.3	(0.2)

* on the excess over GMP

2.14 The financial assumptions used to determine the ongoing rate of contributions to meet the future accrual of benefit are consistent with those adopted to determine the Technical Provisions, and are specified in the Statement of Funding Principles.

2.15 Investment management costs are assumed to be met out of future investment income. The valuation discount rate is therefore net of such costs. The Company will meet certain administrative and non-investment expenses directly and the Company will reimburse the Scheme for the cost of all Pension Protection Fund levies as they are incurred and some non-investment expenses. To the extent (if any) that the Company does not directly meet, or reimburse, the Scheme's expenses they will be met out of the resources of the Scheme. The investment returns on the Scheme's assets are therefore assumed to exceed the discount rate by sufficient margin to meet any such expenses.

There is no allowance in the Scheme's Technical Provisions for these expenses and the future service contribution rate does not include any allowance for expenses. In the results on discontinuance of the Scheme, however, as set out in Section 4 of this Report, allowance has been made for the assumed expenses of winding-up the Scheme.

Demographic assumptions

2.16 The demographic assumptions adopted for this valuation are detailed in the Appendix to the Statement of Funding Principles, and are reproduced in Appendix H of this Report together with a summary of my investigation into the experience of the Scheme over the three years to 5 April 2006.

2.17 The demographic assumptions adopted for this valuation are, with the exception of the mortality assumption and age-by-age salary scale, identical to those adopted at the previous valuation. As described in paragraph 2.9, in calculating the Technical Provisions in relation to members in pensionable service as at 5 April 2006 we have valued their deferred benefits assuming that they ceased service at the valuation date. In calculating the ongoing contribution rate to meet the future accrual of benefits for this valuation, the age-by-age salary scale adopted for the previous valuation has been removed because of the different definition of Pensionable Earnings under the 2006 section.

3 Funding valuation results

3.1 As noted under paragraph 2.1, the main purpose of this actuarial investigation is to review the financial position of the Scheme relative to its statutory funding objective and hence to determine the level of contributions that should be paid in order to ensure that this objective is met. In accordance with the Pensions Act 2004, this assessment has been based upon the method and assumptions specified by the Trustee and recorded in their Statement of Funding Principles (SFP). A summary of the Scheme's funding objective and further detail on the method used to calculate the Scheme's Technical Provisions is set out in Appendix F. The Technical Provisions are not the same as the cost of securing the benefits on discontinuance; this eventuality is covered in Section 4 of this Report.

Stage One – Past Service

3.2 The following statement compares the Scheme's Technical Provisions in respect of service up to 5 April 2006 with the mid market value of the Scheme's assets.

Valuation statement as at 5 April 2006	**£m**
Value of liabilities in respect of:	
Current beneficiaries	849
Deferred pensioners	477
Contributing members, in respect of service up to 5 April 2006	177
ABS/external AVCs	51
Total value of accrued benefits (the Technical Provisions)	**1,554**
Total value of assets	**1,327**
Balance of value of assets over value of the Technical Provisions	**(227)**
Funding level (assets ÷ liabilities)	**85%**

3.3 The table above shows that the value of the assets held by the Trustee was £227 million less than the Technical Provisions at the valuation date. The corresponding position as at the 2003 valuation date was a shortfall of £406 million, with a funding level of 70%.

3.4 A broad analysis of the factors contributing to this reduction in the deficit is shown below.

	£m
Deficit at 5 April 2003	**406**
Interest on the deficit	78
Investment returns in excess of discount rate	(344)
Contributions in excess of cost of accruing benefits	(38)
Members' earnings above assumed rates	5
Demographic and miscellaneous experience items	(31)
Change in real discount rate	156
Change in other assumptions	(5)
Deficit at 5 April 2006	**227**

3.5 It should be appreciated that movements in the market value of assets can produce results which are volatile over time. This makes it important to monitor the development of the Scheme's finances on a regular basis.

Stage Two - Normal Contribution Rate

3.6 The ongoing Company contribution rate required, using the method and assumptions specified in the Statement of Funding Principles, to meet the year-by-year accrual of benefits for future service is 13.0% of members' Pensionable Earnings.

3.7 No allowance is included in the Company contribution rate for administration expenses, which will need to be met in addition. Investment related expenses are incorporated within the investment return that it is assumed will be earned in future (in effect, the investment return is assumed to be net of investment related expenses) so the administration expenses to be met by additional contributions relate only to non-investment expenses.

3.8 Members will pay contributions according to the level of accrual they have selected under the 2006 Section – 4.0% of Pensionable Earnings for an 85ths level of accrual, 5.5% of Pensionable Earnings for a 75ths level of accrual, and 7.0% of Pensionable Earnings for a 65ths level of accrual. Member AVCs are paid in addition.

3.9 The Company contribution rate is that which would be needed to be paid, in addition to the member contributions payable, over the year following the valuation date to meet the cost of the benefits expected to be built up over that year. On this basis, this rate will be sufficient, on the assumptions made, to cover the accrual of benefits in the future if the average age of the membership remains stable. In practice, however, because the Scheme is closed to new entrants, the average age of the active membership might be expected to rise over the coming years and the contribution rate required to cover accruing benefits would therefore also be expected to rise (as there is a shorter period over which investment returns can be earned on the contributions).

Stage Three - Adjustment to the normal future service contribution rate

3.10 Since at the valuation date the value of the Scheme's accumulated assets was below the value of assets required to meet the Technical Provisions, the Trustee and the Company must agree a Recovery Plan. The Recovery Plan specifies the contributions to be paid by the Company in addition to the normal future service contribution rate, as calculated under Stage Two, in order to meet the statutory funding objective by the end of an agreed Recovery Period.

3.11 To eliminate this funding shortfall, the Trustee and the Company have agreed that contributions aimed at meeting the shortfall by 5 April 2016 will be paid to the Scheme by the Company as follows:

- For the year commencing 6 April 2006: £23.1 million payable in three monthly instalments of £1.75 million, one instalment of £2.45 million and eight instalments of £1.925 million, payable in the calendar months April 2006 to March 2007, respectively.
- For the nine Scheme Years commencing 6 April 2007: annual contributions, of one ninth of the shortfall as at 31 March 2007 using the 31 March 2007 Accounting Assumptions. If the deficit (calculated as agreed on the Accounting Assumptions) is within the corridor of 20% below or 15% above the expected deficit for a particular Scheme Year then the extra annual contribution will be that as at 31 March 2007. The deficit will be reviewed as at each subsequent 31 March. If the deficit is outside the corridor for any specific Scheme Year, the Company and the Trustee agree to initiate new discussions on the funding of the Scheme.

3.12 The balance of the funding shortfall is expected to be met by investment returns on the Scheme's assets in excess of those assumed in the calculation of the Scheme's Technical Provisions. If the other assumptions are borne out, the required rate of investment returns is 3.2% per annum above the increase in the Retail Prices Index.

4 The position of the Scheme on discontinuance

4.1 One purpose of having a substantially funded pension scheme is that it provides some measure of security if the sponsoring employers are unable to provide the benefits. This section of the report concentrates on what would happen if the discontinuance provisions (General Rules 33, 34 and 35) of the Consolidated Trust Deed and Rules were invoked.

4.2 In this scenario, active members would become entitled to deferred benefits based on their pensionable service up to, and Final Pensionable Earnings (as defined in the relevant documentation) at the discontinuance date, together with statutory revaluation in line with that applied to early leavers.

4.3 As an alternative to securing the benefits accrued under the Scheme, the Trustee can, under General Rule 35.7, continue the Scheme as a closed scheme.

4.4 In the hypothetical situation of discontinuance, the Scheme would have accrued liabilities comprising:

- the pensions currently and prospectively payable to pensioners and deferred pensioners, and the contingent pensions payable to their dependants
- the accrued deferred pensions to which employed members would have become entitled if they had voluntarily left service at the discontinuance date
- increases in deferred pensions after the discontinuance date at the rates provided by statute and by the Rules
- guaranteed pension increases for the above pensions once in course of payment
- an allowance for expenses.

4.5 If General Rule 35 applies – for example, if the Company were to terminate its liability, or if the Company were to go into liquidation under circumstances such that General Rule 34.4 applied – then the Trustee could seek to meet these accrued liabilities either by winding up the Scheme or by continuing it as a closed fund. Which of these outcomes is most likely depends on the financial position of the Company and the level of assets held in the Scheme. In the following paragraphs, I consider a number of eventualities.

Pension Protection Fund (PPF)

4.6 The Government introduced the Pension Protection Fund (PPF) in April 2005 to ensure that pension scheme members receive a minimum level of benefit if the scheme sponsor becomes insolvent. A summary of the terms of the PPF is provided in Appendix E.

4.7 The Trustees are required by Section 179 of the Pensions Act 2004 to submit routinely an assessment of the Scheme's discontinuance position, based on assumptions specified by the PPF and accrued benefit entitlements similar in form to the compensation payments that could be provided by the PPF. The results of my Section 179 valuation for the Scheme as at 5 April 2006 reveal that the Scheme's assets were approximately 82% of the liabilities on this measure.

Discontinuance when the Company is insolvent

4.8 If the Trustee had decided to wind up the Scheme as at 5 April 2006 and the Company had been insolvent at the time, then my estimate of the Section 179 valuation position suggests that the Scheme was underfunded on this measure. In this case, the most likely outcome would have been that the Trustee would have applied for entry to the PPF and members' benefits would then have been provided from that arrangement at the level summarised in Appendix E. This would have meant that the members would receive 100% of the benefits specified in levels one and two of the statutory priority order summarised in Appendix E, and 0% of the benefits in levels three and four.

Discontinuance when the Company is solvent

4.9 If the Trustee had decided to wind up the Scheme as at 5 April 2006 and the Company were solvent, legislation would impose an employer debt on the Company equal to the Actuary's estimate of the full cost of securing all accrued benefits with an insurance company. The amount of the debt that would actually be payable in practice would clearly depend on the Company's ability to pay what could be a substantial sum of money. However, in theory, in this case all of the benefits under categories one to four above would be met. On receiving this employer debt from the Company, the Trustee could decide either to buy out the Scheme's liabilities or to run the Scheme as a closed fund.

4.10 I am required to provide the Trustee with an estimate of the level of cover for accrued benefits if the Trustee were to seek to buy out the liabilities with an insurance company, on the hypothetical premise that no further financing would be available from the Company. To estimate this cost, I have assumed that the Trustee invested the funds at the valuation date in a portfolio of gilts, matched as far as possible with the liabilities. I have assumed that around £35 million of the Scheme's assets would be set aside to cover future (non-investment related) administration expenses, and have made a further reserve for the remaining investment uncertainties by allowing for the investment return on the assets to be 0.5% a year less than was available on gilts as at 5 April 2006. The resulting discount rate assumed is 3.9% per annum. Other relevant assumptions are as set out in Appendices G and H.

4.11 The result, based on the position at 5 April 2006, is to suggest that, overall, the cover for accrued benefits would be approximately 62%. It should be noted that this figure is an estimate of the position at 5 April 2006 were the Trustee to have bought out the Scheme's accrued liabilities at that date. Such an estimate cannot be relied upon, as market changes in both interest rates and in supply and demand for annuity business mean that the actual position at any particular point in time can be established only by completing a buy out.

4.12 The corresponding level of cover at the previous valuation was approximately 54%. The increase in solvency cover is mainly due to the actual investment return achieved on the Scheme's assets, which is in excess of the assumed level of investment return underlying the solvency measure.

Solvency and the statutory funding objective

4.13 If the statutory funding objective had been exactly met on 5 April 2006, the cover for accrued benefits on the solvency measure would have been approximately 73%.

Running the Scheme as a closed fund

4.14 If, instead of securing the accrued benefits with an insurance company, the Trustee decided to run the Scheme as a closed fund, the ability to provide members' accrued benefits in full from the present assets of the Scheme would depend on the future investment returns achieved. Running the Scheme as a closed fund might be considered appropriate, for example, if either the assets are considered sufficient to meet future benefits as they fall due or there are practical or financial restrictions on buying out the Scheme's liabilities with an insurance company.

4.15 Discontinuance of the Scheme might well lead to a change from the investment strategy currently adopted by the Trustee. For example, the Trustee might reduce the equity content of the investment policy, choosing instead further exposure to the lower risks and volatility of index linked and fixed interest bonds. The effects of such a change would depend on relative market yields at the time, but would generally be expected to lead to a lower investment return.

4.16 The most appropriate investment policy will depend on the circumstances, including the value of the Scheme's assets, the nature of its liabilities and investment market conditions at the time.

5 Commentary on the results

5.1 As noted above, the assumptions used to determine the Scheme's Technical Provisions under Section 3 or the Scheme's solvency position under Section 4 each represent only one view of likely future events. Recent experience of UK pension schemes has highlighted how the financial position can be impacted by actual experience being different to long-term valuation assumptions, particularly in relation to investment returns and post-retirement mortality.

Sensitivity to investment conditions

5.2 The financial assumptions made in determining the funding target and the associated contribution requirements are described in the Statement of Funding Principles. They cover, amongst other things, the approach used to determine the discount rates for the liability calculation and the investment returns that are effectively assumed to be achieved on the Scheme's assets. The results of the valuation are particularly sensitive to the expected level of the future returns that will be achieved on the Scheme's investments (which are merely assumptions, albeit prudent ones). In practice, however, it would be extremely fortuitous for the assumptions made to be precisely borne out in future.

5.3 In fact, the possible variation in outcomes is considerable, given the substantial proportion of the assets expected to be invested in volatile assets such as equities , the value of which may not move in line with the assessment of the liabilities, (the value of the liabilities is expected to move broadly in line with corporate bond yields). The Trustee, members and the Company should therefore be aware of the sensitivity of the results to future investment conditions.

5.4 If investment returns were to be lower in the long term than expected, then the normal ongoing cost of providing the benefits would be higher and the funding position of the Scheme would worsen.

5.5 To illustrate this, if the yields available on bonds at the valuation date had been lower by 0.25% per annum, with a corresponding impact on the discount rate but without any change in asset values, I estimate that the following changes in funding levels would have taken place.

	Actual funding level	**Funding level assuming 0.25% pa fall in bond yields**
Ongoing	85%	82%
Buy-out with an insurance company	62%	61%

5.6 Overall, therefore, given that investment conditions can be very volatile, particularly in the short term, there is significant risk that the financial position of the Scheme could worsen and the contributions calculated to be required under the Recovery Plan may prove to be insufficient. Conversely, substantial increases in equity values relative to movements in the liabilities would reduce the deficit.

5.7 'Catastrophic' investment conditions which would produce significantly worse funding positions than those shown in the above table are also possible.

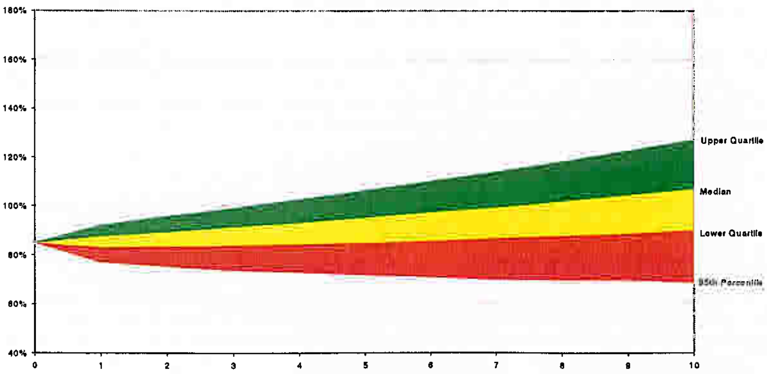
Sensitivity to mortality experience

5.8 The future financial position of the Scheme is also susceptible to future variations in the mortality experience of its pensioners relative to the assumptions adopted for valuation purposes. By means of example, if I were to assume that future improvements in the life expectancy of Scheme members were to be in line with the 'medium cohort' allowance published by the CMI (as used for the results shown in Sections 3 and 4), but with a minimum annual rate of improvement of 1.0% pa, this would result in a small increase (less than half a year) in the life expectancy of someone currently aged 65 and adds one year to the life expectancy of someone aged 65 in 20 years' time. I estimate that the Scheme's funding level compared to its Technical Provisions would then fall from around 85% to approximately 84%. If I assumed the minimum annual rate of improvement was 2.0% pa instead of 1.0% pa, this would add over a year to the life expectancy of someone currently aged 65 and around four years to the life expectancy of someone aged 65 in 20 years' time and the Scheme's funding level compared to its Technical Provisions would then fall to approximately 80%.

Sensitivity to investment allocation

5.9 The sensitivities in 5.5 above illustrate how the valuation results might have appeared had market conditions at 5 April 2006 been significantly different from their actual levels. This does not, however, directly show how the Scheme's position is expected to develop over time given the Scheme's current investment policy to hold a substantial proportion of assets in relatively volatile investments such as equities.

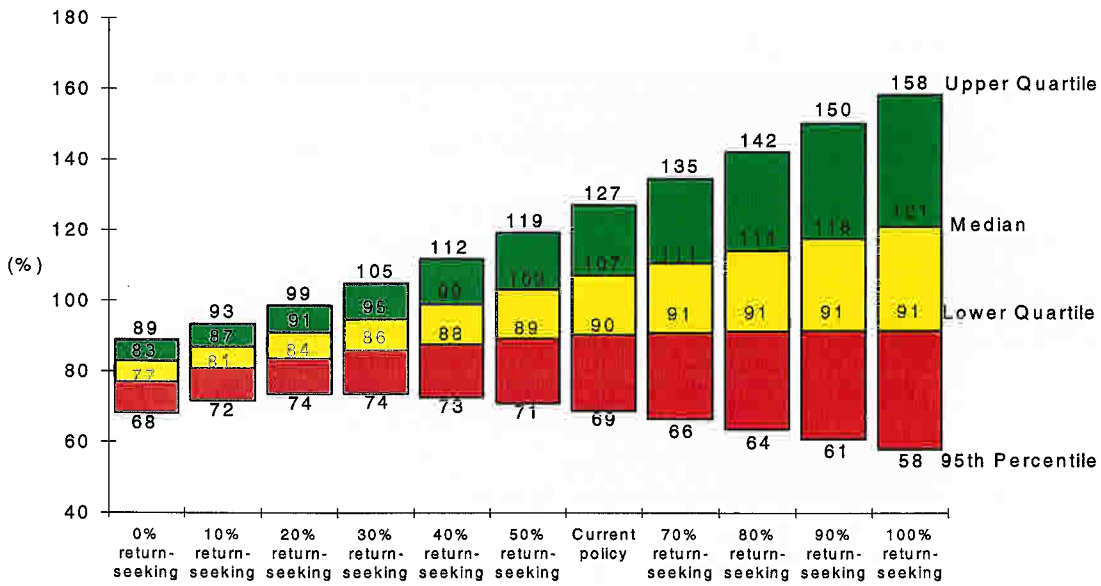
5.10 The following chart illustrates how the Scheme's ongoing funding position is expected to develop over the next 10 years given the Trustee's investment policy current at the valuation date. For this purpose, we have used a stochastic projection of the Scheme's assets based upon Watson Wyatt's asset model, assuming no further build up of benefits after 5 April 2006 and that additional contributions are paid in line with the proposed Recovery Plan:



Watson Wyatt
Worldwide

5.11 The chart highlights that there is a significant spread of possible outcomes on the ongoing funding position after 10 years. For example, the median outcome (where 50% of outcomes are expected to be worse) is a funding level of 107%, whereas the "1 in 20" worst outcome (where 5% of outcomes are expected to be worse) is a funding level of 69%. This means that under the proposed Recovery Plan, it is expected that the Scheme will more than make up the shortfall disclosed at 5 April 2006 on the ongoing funding basis under the current investment strategy. There is, however, a risk that the Scheme's ongoing funding position will deteriorate compared to the position at 5 April 2006.

5.12 The following chart illustrates the ongoing funding position at the end of a 10 year period were the Trustees to amend their investment policy at 5 April 2006 to reduce the proportion of return-seeking assets held:



5.13 This chart suggests, as one might reasonably expect if one believes that return-seeking assets are likely to provide higher investment returns over the long term, that the median closed fund position gets worse as the allocation to equities decreases (107% under the current allocation, reducing to 99% and 91% as the allocation to return-seeking assets drops to 40% and 20% respectively) but that the uncertainty in outcomes (represented by the height of the columns) is also lessened. Getting the balance between these two competing factors, uncertainty and return, is an important consideration for the Trustee when reviewing the Scheme's investment strategy.

5.14 The above charts suggest that the Scheme's ongoing funding level is expected to improve in the 10 years to 5 April 2016, as a result of the additional contributions expected to be paid and the expectation that the Scheme's assets will outperform bond returns. The assumed median investment return, based on the Scheme's strategic asset allocation current at the valuation date, is 3.7% per annum over the 10 years to 5 April 2016. The Scheme's solvency level on buy out is also expected to improve from my estimate of 62% as at 5 April 2006 as described in paragraph 4.11 of this Report. By 5 April 2009, it is expected that the median solvency level at this time will have improved to around 68%. By 5 April 2016, it is expected that the median solvency level at this time will be around 82%. However, these estimates of the Scheme's likely future solvency level are based on various assumptions being borne out in practice, and the actual future position may differ materially from these expectations as illustrated by the preceding charts.

5.15 Since the effective date of this valuation the Trustee has decided, in consultation with the Company, to amend its strategic asset allocation. The change being made is to reduce the equity allocation from 47.5% to 33% with a corresponding increase in the allocation to bonds. This change will reduce the expected volatility of the investment returns relative to the value of the liabilities and will reduce the expected returns on the Scheme's assets. Under the Recovery Plan the median funding level is 100% by 5 April 2016 once allowance is made for this strategic asset allocation change.

6 Conclusions

6.1 The Scheme had assets equal to 85% of its Technical Provisions at the valuation date. This meant that the Scheme assets were £227 million less than its Technical Provisions.

6.2 The Scheme's solvency level assuming that the Trustee attempted to secure the Scheme's liabilities by the purchase of annuities had it been discontinued is estimated to have been around 62%. The level of cover against the Section 179 PPF liabilities was 82%.

Future accrual of benefit

In respect of future accrual of benefits and the provision of death-in-service benefits relating to their active members, the Employers will pay:

- For the year commencing 6 April 2006: 12.5% of active members' Pensionable Earnings
- For the years commencing on or after 6 April 2007: 13.0% of active members' Pensionable Earnings

Members will pay contributions according to the level of accrual they have selected under the 2006 Section – 4.0% of Pensionable Earnings for an 85ths level of accrual, 5.5% of Pensionable Earnings for a 75ths level of accrual, and 7.0% of Pensionable Earnings for a 65ths level of accrual. Member AVCs are paid in addition

Contributions are to be paid to the Scheme on or before the 19th of the calendar month following that to which the payment relates.

Expenses

In respect of Scheme expenses, the Company will pay to the Scheme the cost of Pension Protection Fund ('PPF') levies, at least 7 days prior to the deadline for the Scheme to pay the PPF, as imposed by the PPF Board. In addition, the Company will meet the following expenses directly by offsetting them against invoices otherwise chargeable to the Scheme.

- the cost of the Trustee's indemnity insurance
- expenses of £450,000 for the year beginning 6 April 2006, increasing each subsequent Scheme Year in line with the pension increase given for the 2006 Section as at 1 May in that year ignoring, in all years, any capping at 2.5% per annum.

Deficit reduction contributions

In respect of the shortfall in funding in accordance with the Recovery Plan dated 5 April 2007, the Company will pay:

- For the year commencing 6 April 2006: £23.1 million payable in three monthly instalments of £1.75 million, one instalment of £2.45 million and eight instalments of £1.925 million, payable in the calendar months April 2006 to March 2007, respectively.
- For the nine Scheme Years commencing 6 April 2007: annual contributions, of one ninth of the shortfall as at 31 March 2007 using the 31 March 2007 Accounting Assumptions. If the deficit (calculated as agreed on the Accounting Assumptions) is within the corridor of 20% below or 15% above the expected deficit for a particular Scheme Year then the extra annual contribution will be that as at 31 March 2007. The deficit will be reviewed as at each subsequent 31 March. If the deficit is outside the corridor for any specific Scheme Year, the Company and the Trustee agree to initiate new discussions on the funding of the Scheme.

The proposed Recovery Plan is expected to return the Scheme to full funding no later than 5 April 2016.

Schedule of Contributions

6.3 In accordance with the above, the Trustee and the Company have agreed that the Employers will pay contributions as summarised above and set out in the Schedule of Contributions dated 5 April 2007:

6.4 The financial position of the Scheme will be reassessed annually and by a full actuarial valuation no later than as at 5 April 2009.

IR Skinner

I R Skinner
Fellow of the Faculty of Actuaries

5 April 2007

Watson Wyatt Limited
Watson House
London Road
Reigate
Surrey
RH2 9PQ

\\Wwp\data\General Data Redhill\PENC\ALSTOM\2006\Valrpt2006.doc

A Scheme provisions

The Scheme is a registered pension scheme under the Finance Act 2004.

Main Section

The benefits payable to, and contributions payable by, individual members of the Main Section of the ALSTOM Pension Scheme are described in the Consolidated Trust Deed and Rules. A summary is set out below. The Section closed with effect from 6 April 2006.

Pension Age	The age of 65 years
Pension Date	In relation to a Member who attains Pension Age on the first day of a calendar month, that day; in relation to other Members, the first day of the calendar month following attainment of Pension Age
Scheme Year	The period 6 April to the following 5 April inclusive
Pensionable Earnings	The Member's gross pay for any Scheme Year
Final Pensionable Earnings	The Member's highest averaged Pensionable Earnings over three consecutive Scheme Years in the last ten completed Scheme Years
Relevant Social Security Pension	The basic State single-person's retirement pension, averaged over the same three-year period used for the determination of the Member's Final Pensionable Earnings
Pensionable Service	Years and completed months of employment with any Employer under the Scheme
Relevant Earnings Related Deduction	A pension calculated as 0.9% of the Member's Final Pensionable Earnings in excess of the Relevant Social Security Pension (to a maximum of six times that amount) for each year of Pensionable Service after 5 April 1978, with a maximum of 20 years
'Basis 1' Pension	A pension calculated as:

	2% of Final Pensionable Earnings for each year of Pensionable Service after 5 April 1973 less 2% of the Relevant Social Security Pension for each year of Pensionable Service less the Member's Relevant Earnings Related Deduction
'Basis 2' Pension	A pension calculated as 50% of the Member's contributions to the Scheme without Credited Interest
'Basis 3' Pension	A pension calculated as 17.5% of the Member's contributions to the Scheme with Credited Interest
Retirement at Pension Date	A pension calculated as the greatest of the Member's Basis 1, Basis 2 and Basis 3 Pensions in respect of Pensionable Service prior to 6 April 2003. In respect of Pensionable Service after 5 April 2003, only Basis 1 pension accrues
Retirement before Pension Date, on grounds of Disablement	A pension calculated as the greater of: the greatest of the Member's accrued Basis 1, Basis 2 and Basis 3 Pensions and the Basis 1 Pension that would have been payable to the Member had they remained in Pensionable Service until their Pension Date
Retirement before Pension Age, not on grounds of ill-health:	A pension calculated as at Pension Date, except that:

The Member's actual amount of Pensionable Service is used

The Member's Relevant Earnings Related Deduction is calculated by reference to the amount of service that would have been completed at Pension Date, and this amount is reduced to reflect the Member's completed period of service

The pension shall be reduced in accordance with tables of early retirement factors

Lump Sum at Retirement	Members may commute pension for a cash lump sum at retirement
	The maximum lump sum available is 3/80 of Final Pensionable Earnings for each year of Pensionable Service
Death in Service	A lump sum calculated as the sum of:
	Twice the Member's Pensionable Earnings
	One-half of the Member's Pensionable Earnings if there is a qualifying spouse or dependant(s)
	One-half of the Member's Pensionable Earnings for each qualifying child
	(To a minimum of six times the Member's Pensionable Earnings from 6 April 2003);
	plus
	the Member's contributions with Credited Interest
	In addition, members may pay additional ABS contributions to secure additional life cover, which is separately insured.
Death of a Pensioner	A lump sum equal to the balance of the pension payments due during the first five years of

	payment
	A pension payable to the qualifying spouse or dependant, equal to 50% of the Pensioner's pension, without reduction for commutation
Leaving Service	A pension calculated as at Pension Date, except that: The Member's actual amount of Pensionable Service is used The Member's Relevant Earnings Related Deduction is calculated by reference to the amount of service that would have been completed at Pension Date, and this amount is reduced to reflect the Member's completed period of service
Death between leaving service and attaining Pension Date	A lump sum equal to 1.5 times the Member's contributions with Credited Interest
Pension Increases	Pensions in deferment and in payment are increased each 1 May by the lesser of the percentage increase in the Government index of retail prices, and 5%
Contributions	Members contribute at the rate of 4% of Pensionable Earnings
Relationship to the State Second Pension (S2P)	The ALSTOM Main Section is contracted into the S2P; Members continue to pay contributions to S2P and accrue rights to S2P benefits

2006 Section

This Section was introduced for future accrual after 5 April 2006 for members in active service on 6 April 2006. These members have been given the opportunity to receive a service credit in the 2006 Section in exchange for their benefits accrued to 5 April 2006 under the pre-6 April 2006 scale of benefits.

The benefits payable to, and contributions payable by, individual members of the 2006 Section of the ALSTOM Pension Scheme are described in the 2006 Section member booklet and Amending Deed dated 7 April 2006. A summary of the main benefits is set out below.

This section is not contracted-out of the earnings related section of the State pension scheme.

Normal Retirement Date	The member's 65th birthday
Pensionable Earnings	Basic pay plus other fixed allowances decided by the Company from time to time
Final Pensionable Earnings	The average of the best three consecutive Scheme Year's Pensionable Earnings in the last ten Scheme Years of membership.
Pension on retirement at Normal Retirement Date	Members can choose between three tiers with different accrual rates and contribution rates, as follows:

	Contribution rate (% of Pensionable Earnings)	Multiple of Pensionable Earnings for each year of service
Tier 1	4.0%	1/85th
Tier 2	5.5%	1/75th
Tier 3	7.0%	1/65th

Pension at Normal Retirement Date is calculated based upon Pensionable Service completed in each tier and Final Pensionable Earnings

Early Retirement	Early retirement is permitted between age 55 and age 65, with the agreement of the Company and the Trustee. The pension is calculated as if the member had retired at Normal Retirement Date, except that Pensionable Service and Final Pensionable Earnings at the date of early retirement are used, and the resulting pension is reduced in accordance with tables of early retirement factors

Ill-health early retirement	For members retiring on the grounds of Serious Ill-Health, the pension will be based on potential Pensionable Service until Normal Retirement Age, using Final Pensionable Earnings at the date of retirement, with no reduction for early payment. For members retiring on the grounds of Partial Ill-Health, the pension will be calculated in the same way as for Serious Ill-Health retirement, but will be reduced
Commutation	Members may commute pension for a cash lump sum at retirement, subject to a maximum of 25% of the Capital Value of their benefits
Death in service	A lump sum of four times Pensionable Earnings in the last complete Scheme Year before death, plus a Dependant's pension of 50% of the member's pension calculated using Pensionable Service to Normal Retirement Date. Children's benefits of 25% of the Dependant's pension for up to four children are also payable
Death after retirement	A lump sum equal to the balance of the pension payments due during the first five years of payment, and a pension payable to the qualifying spouse or dependant, equal to 50% of the Pensioner's pension, without reduction for commutation
Withdrawal benefits	A deferred pension calculated as at Normal Retirement Date, using Final Pensionable Earnings and Pensionable Service as at the date of withdrawal. The deferred pension is increased in line with RPI, subject to a maximum of 5%, for each complete year from date of leaving to date of retirement
Pension increases	Pensions in payment increase in line with RPI up to a maximum of 2.5% in any one year

In my calculations I have taken account of the benefits of the other sections as set out in the relevant Schedules of the Consolidated Trust Deed and Rules.

B The information supplied

The information supplied to us for the purposes of the valuation is summarised below; the corresponding 2003 figures are shown for comparative purposes. The primary responsibility for this information lies with the Trustee. I have relied on its accuracy in my calculations. The Trustee will, in turn, have relied on others for the maintenance of accurate data, including the Company which must provide and update the membership information. Nevertheless, it is the Trustee's responsibility to ensure the adequacy of these arrangements. I have carried out checks on the consistency of the data with the information provided for the previous valuation, and its overall reasonableness, and these checks have given me no reason to doubt the correctness of the information supplied. It is not possible, however, for me to confirm that the detailed information provided in respect of individual members is correct.

	5 April 2003	5 April 2006
Pensioners and dependants		
Number	9,667	11,035
Annual pension (1)	£46m	£57m
Deferred members (2)		
Number	7,160	11,628
Deferred pension (3)	£15m	£34m
Contributions (4)	£19m	£39m
Contributions with credited interest (4)	£53m	£94m
Active members		
Number	9,331	2,522
Pensionable Earnings	£262m	£73m
Contributions (4)	£45m	£11m
Contributions with credited interest (4)	£96m	£23m

(1) Pensions in payment include the pension increase to Main Section pensions granted on 1 May following the stated date.

(2) These figures include 289 members involved in the transfer to Cegelec.

(3) Deferred pensions include increases to the relevant date.

(4) Contributions are members' total past contributions and are shown for Main Section members only.

The market values of the different types of investments held by the Scheme as at 5 April 2003 and as at 5 April 2006 are summarised below:

	Market value as at 5 April 2006		Market value as at 5 April 2003	
	£m	%	£m	%
UK equities	333.4	25.8	263.4	29.3
Overseas equities	333.9	25.9	265.4	29.5
UK fixed interest	202.8	15.7	140.8	15.7
Overseas fixed interest	151.6	11.7	90.6	10.1
UK index-linked	145.5	11.3	41.9	4.7
Property	121.1	9.4	77.4	8.6
Short-term deposits and net current assets	2.7	0.2	19.1	2.1
Total	**1,291.0**	**100.0**	**898.6**	**100.0**

The above figures include net current liabilities of £3.7 million as at 5 April 2006 (2003: net current liabilities of £4.8 million). The above details do not include investments held in respect of Additional Voluntary Contributions with external providers. As at 5 April 2006 these investments had a market value of £36.4 million (2003: £1.0 million).

Strategic asset allocation

The Trustee had a strategic investment policy at the valuation date in the form of the following fixed benchmark allocation.

	Benchmark allocation
	%
UK equities	23.75
Overseas equities	23.75
UK fixed interest	16.67
Overseas fixed interest	10.00
UK index-linked	13.33
Property	12.50
	100.00

The Trustee has subsequently decided to amend its strategic asset allocation as explained in paragraph 5.15.

C Financial transactions since the previous valuation

Over the three year period to 5 April 2006, the Scheme has undertaken the following financial transactions:

Consolidated Revenue Account for the period 5 April 2003 to 5 April 2006	**£m**	**£m**
Fund at 5 April 2003		**899.6**
Contributions from Principal Employer	77.2	
Contributions from members - normal	17.6	
- AVCs	5.5	
Income from investments net of investment expenses	95.5	
Transfer values received from other funds	39.9	
Total income		**(+) 235.7**
Pensions and commutation lump sums paid	190.9	
Lump sum death benefits	3.5	
Transfer values paid to other funds	17.8	
Refunds of contributions	2.8	
Administration expenses	4.6	
Total outgo		**(-) 219.6**
Change in market values		**(+) 411.7**
Fund at 5 April 2006		**1,327.4**

The above details include investments held in respect of Additional Voluntary Contributions held with external providers. As at 5 April 2006 these investments had a market value of £36.4 million (2003: £1.0 million).

D Events since the previous valuation

Contribution paid since the last valuation

Since 5 April 2003, contributions have been paid to the Scheme as follows:

Contributions over the period 6 April 2003 to 27 May 2004, in accordance with the Schedule of Contributions dated 25 May 2001

	Member rate, % of Pensionable Earnings	**Employer rate, % of Pensionable Earnings**
Main Section	3.0	6.6
Former members of the Cegelec (UK) Pension Scheme	4.0	12.0
Former members of the ABB Plan	5.0	15.0
Former members of ESPS MANWEB Section	6.0	7.1
Former members of Scottish Power Pension Scheme	5.0	11.6
Former members of ESPS NORWEB Section	As specified in the Rules	8.6
Former members of United Utilities Pension Scheme 1/60th scale	5.0	5.5
Former members of United Utilities Pension Scheme 1/80th scale	3.0	5.5

Contributions over the period 28 May 2004 to 5 April 2006, in accordance with the Schedule of Contributions dated 28 May 2004.

	Member rate, % of Pensionable Earnings	Employer rate, % of Pensionable Earnings
Main Section	4.0	8.0
Contracted-out Section		
Former members of		
Cegelec	4.0	12.0
ABB	5.0	15.0
Babcock	5.0	15.0
Retirement Capital Section	4.0	8.0

The contributions are deducted from members' salaries each month and remitted to the Trustee, together with the employers' contributions. Members' AVCs or ABS contributions or contributions to the Additional Savings Plan are in addition to the above amounts.

In addition to the contributions shown above, the employers paid the following

- Non-investment administration expenses for the year commencing 6 April 2004.
- The cost of augmentations required by the Company and agreed by the Trustee, paid on the implementation of such augmentations or on such other dates as agreed with the Trustee.
- £13.7 million per annum, paid to the Scheme in equal monthly instalments from 6 April 2005, with each instalment paid no later than the last day of the calendar month to which it relates.

Benefit changes

The ALSTOM Pension Scheme is now closed to new members.

A new section – the 2006 Section – was introduced for future accrual for active members in pensionable service at 5 April 2006. These members will be given the opportunity to receive a service credit in the 2006 Section in lieu of their benefits accrued to 5 April 2006 under the various pre-6 April 2006 benefit scales. A summary of the 2006 Section benefits is given in Appendix A.

There is no further accrual of benefit under the Retirement Capital Plan with effect from 5 April 2006.

Increases to retirement capital under the Retirement Capital Plan

The discretion to award increases to the retirement capital built up under the Retirement Capital Plan rests with the Company, not the Trustee. Increases granted over the inter-valuation period were as follows:

Scheme year ended	Increase to retirement capital
5 April 2004	0.0%
5 April 2005	3.2%
5 April 2006	2.4%

Credited Interest

The Trustee, having obtained the advice of the Actuary and having consulted the Company, determines the rate of Credited Interest, subject to a minimum rate of 2.5% per annum.

Credited Interest awarded over the inter-valuation period was as follows:

Scheme year ended	Rate of Credited Interest
5 April 2004	2.5%
5 April 2005	2.5%
5 April 2006	2.5%

Disposals

During 2001/2002 ALSTOM disposed of its interests in its Contracting businesses. It was agreed that these businesses could continue to participate in the Scheme until 30 June 2002 when they would leave the Scheme. As at 5 April 2006 the payment of the bulk transfer to Cegelec Limited had not been completed.

On 31 December 2003 the Transmission and Distribution sector was sold to Areva. The majority of members affected by this sale have automatically become deferred members and no bulk transfer is to be made. However, a number of these members are Protected Persons under the Electricity Act or have been deemed as Protected Persons and these were subject to a bulk transfer agreement. In August 2005 a payment of £3.7 million was made in respect of the former Norweb Protected and deemed Protected Persons. Then in October 2005 a payment of £4.2 million was made in respect of the former Scottish Power Protected and deemed Protected Persons. No further payments are required.

On 10 November 2005 ALSTOM Power Conversion Limited was sold to Barclays Private Equity. Of the 772 members affected by the sale, 706 became deferred pensioners and 66 RCP members received an automatic refund of contributions. There will be no bulk transfer for the deferred pensioners.

Events since 5 April 2006

Since the end of the Scheme year, the Scheme has accepted, at the Company's request, the liabilities for Basis 4 benefits and certain benefits from the ALSTOM Secured Unapproved Pension Scheme. Payments in respect of these liabilities of £5 million, in May 2006 and £742,000 in July 2006 have already been made. A further payment of £4.890 million will be made in April 2007 to provide the balance of the financial cover required by the Trustee (having obtained appropriate advice from the Scheme Actuary) to meet the cost of assuming these liabilities.

The Trustee has decided to amend its strategic asset allocation as explained in paragraph 5.15.

E Legislative changes since 5 April 2003

Legislative changes – Pensions Act 2004 (and associated Regulations)

Since the previous valuation the government enacted the Pensions Act 2004 which introduced new requirements on the funding of UK defined benefit pension arrangements and several other measures that directly or indirectly affects the Scheme.

Scheme funding

The Pension Act 2004 replaced the prescriptive statutory funding test (the 'Minimum Funding Requirement') with a scheme-specific standard for actuarial funding valuations with an effective date on or after 23 September 2005. The legislation was supplemented with regulations and Regulatory codes of practice. This is the first actuarial valuation of the Scheme under this new funding regime. Central to the new funding regime are:

- *Statutory Funding Objective* (SFO) – this is a requirement that the Scheme has appropriate and adequate assets to meet its *Technical Provisions*. The Technical Provisions mean the Actuary's assessment, calculated on the scheme-specific assumptions determined by the Trustees, of the amount required to meet the Scheme's liabilities as they fall due
- *Statement of Funding Principles* (SFP): this is a document prepared by the Trustee which must set out their policy for ensuring that the SFO is met. That is, it must set out the Trustee's choice of methods and assumptions for determining the Scheme's Technical Provisions, after taking advice from the Actuary. Due to the Company's historic power to establish its contributions to the Scheme (see below) the regulations require the Trustee to reach agreement with the Company on the content of the SFP.

Under General Rule 46.1, the Company had the power to determine the contributions it would pay to the Scheme provided the contributions, in the opinion of the Actuary, were no greater than is necessary to ensure the solvency of the Scheme. Under the new funding regime, the Company no longer has the sole power to determine the contributions it will pay to the Scheme and instead the Trustee and the Company must reach an agreement on the contributions to be paid. This represents a significant change in the balance of power between the Trustee and the Company.

The main purpose of the actuarial funding valuation is then to assess whether the Scheme meets its Technical Provisions at the effective date of the valuation, based upon the method and assumptions specified in the SFP. The Actuary has to certify that the calculation of the Technical Provisions at the valuation was calculated in accordance with the prescribed requirements.

It is important to note that the legislation does not require schemes to fund at a level sufficient to meet the buy out cost of the liabilities, or even the buy out cost of the 'protected liabilities' under the Pension Protection Fund (PPF). The Trustee is required, however, to obtain the Actuary's estimate of the Scheme's solvency position at the effective date of the valuation.

If the valuation reveals that the Scheme does not have sufficient assets to cover its Technical Provisions, the Trustee is required to prepare a *Recovery Plan* to bring the Scheme back to full funding (ie the assets to meet the Technical Provisions). The Recovery Plan must be based upon advice from the Actuary and have regard to the nature and circumstances of the Scheme. It must also be agreed with the Company.

On receiving the actuarial valuation report, the Trustee and the Company have to agree a Schedule of Contributions which specifies the contributions to be paid to the Scheme by the members and the Company and the dates by which they are required to be paid. This Schedule must also be agreed with the Company and must be certified by the Actuary.

Pension Protection Fund (PPF)

The Pensions Act 2004 introduced the Pension Protection Fund (PPF) with effect from 6 April 2005. The PPF is intended to ensure that members of defined benefit occupational pension schemes can be assured that they will receive a minimum proportion of their accrued retirement benefit, if their employer's business fails. That is, on an insolvency event of the employer the trustees of a pension scheme can apply for admission to the PPF and if it meets prescribed criteria (in particular, but not limited to, the scheme having insufficient assets to secure the minimum level of benefits on a prescribed actuarial basis) then the PPF will absorb the assets of the Scheme and provide a benefit currently as described below:

- For non-pensioners: a deferred pension equal to 90% of the pension built up to date, subject to a maximum amount and payable from Normal Pension Date
- For pensions in payment: where the member is younger than Normal Pension Age and retired in normal health, 90% of the pension in payment subject to a maximum amount which varies by age. For other pensioners (or dependants) the pension in payment.
- Deferred pensions are increased in line with price inflation (capped at 5%) between the assessment date and Normal Pension Age.
- In payment, pensions built up before 6 April 1997 receive no increases in payment. Pensions built up on or after that date will increase in line with price inflation (capped at 2.5% a year).
- Survivor benefits are provided if they were provided under the scheme rules.

In the above, Normal Pension Age is essentially the earliest age at which members can receive an unreduced pension under the scheme rules.

Consequently, the PPF does not provide benefits at the same level as those provided by the Scheme.

The PPF is funded through a combination of scheme-based and risk-based levies on UK occupational defined benefit pension schemes; although in the event of it having insufficient funds to meet its liabilities it can decide to reduce the compensation payments being paid to ex-pension scheme members. As part of the assessment of the risk-based levy, pension scheme trustees are required under Section 179 of the Pensions Act 2004 to submit routinely an assessment of their scheme's discontinuance position, based upon assumptions specified by the PPF and accrued benefit entitlements in a similar for to the compensation payments that could be provided by the PPF.

The government established the PPF Board to oversee the fund and also to raise annual levies from defined benefit arrangements to finance its liabilities and its running costs. The government also introduced a Pensions Regulator, one of whose roles is to ensure the security of the PPF.

Statutory Priority Orders

On buying out the Scheme's liabilities, the Scheme benefits would have been secured in the priority order specified in the Consolidated Trust Deed and Rules, as overridden by the Pensions Act 1995 and associated regulations. With effect from 31 August 2005, the benefits would have needed to be secured in broadly the following order (after allowing for expenses and any potential debts to third parties).

1 Benefits relating to pension annuities secured by the Scheme before 6 April 1997.

2 The cost to the Scheme of securing the liabilities for pensions and other accrued benefits that would be payable by the PPF (if the Scheme were eligible for entry to the PPF).

3 Benefits in respect of defined benefit AVCs not already covered above (money purchase liabilities are to be excluded from the priority order and should therefore be secured in full).

4 All other pensions and benefits provided by the Scheme, including pension increases (where these exceed those under the PPF).

Other

The Pensions Act 2004 introduced a number of other measures, including:

- For benefits built up after 5 April 2005, the statutory minimum annual increase to pensions in payment is price inflation subject to a cap of 2.5% ('LPI 2.5%'). The current Rules of the Scheme currently provide a higher minimum increase to pensions in payment for benefits accrued prior to 5 April 2006, although benefits accrued in the 2006 Section post-5 April 2006 are subject to LPI 2.5% increases in payment.

- There were a number of measures relating to the pensions aspects of commercial transactions and business reorganisations.
- There were minor modifications to the provisions covering contracted-out rights.

Legislative changes – Finance Act 2004

The provisions of the Finance Act 2004 do not affect this actuarial valuation. I provide a brief summary of the provisions, however, for future reference.

In essence this Act and associated Regulations were intended to simplify the entire taxation framework for UK pensions. From 6 April 2006 the former Inland Revenue maximum limits on benefits payable from approved pension schemes were replaced by a system of tax "allowances" by the new HMRC. More specifically:

- Members can receive any amount of pension and lump sum from an authorised occupational pension scheme. However, if the benefits provided have a value higher than a specified amount (the 'Lifetime Allowance', currently £1.5 million) then the excess value over the Lifetime Allowance is subject to additional tax.
- The value of benefits for the purpose of comparing against the Lifetime Allowance is calculated as 20 times the pension provided plus the face value of the cash sum provided. Benefits provided from money purchase arrangements are based upon the fund value.
- Cash sums at retirement are restricted to 25% of the value of the member's benefits.
- The contributions that can be paid to tax-advantaged pension arrangements are restricted to an Annual Allowance, currently £215,000 a year (or 100% of earnings if less).
- Dependants' pensions are not tested against the Lifetime Allowance, but lump sums provided to dependants are tested against the member's unused allowance
- The technical details of benefits that can be provided as 'authorised benefits' from a tax-advantaged pension arrangement were specified.
- The statutory surplus test was abolished.
- Transitional arrangements were introduced for cases where the new requirements would adversely impact member's benefits compared to pre-6 April 2006 limits.

F Funding objective and method

Statutory funding objective

The statutory funding objective is that the Scheme should have sufficient and appropriate assets to cover its Technical Provisions, and the Statement of Funding Principles sets out the Trustee's policy for securing that this objective is met. The Trustee has no funding objectives in addition to the statutory funding objective.

The statutory funding objective is similar to the Trustee's long-term funding target from the previous valuation. The funding objective has two parts. The first part is that the Company and members should pay 'ongoing' contributions each year at a rate estimated to meet the cost of the year-by-year accrual of benefits. The second part is that the accumulated assets should cover the expected cost of prospective benefits arising from service completed (on the assumptions made) to cover such benefits.

Technical provisions

The Trustee and the Company have agreed that the Technical Provisions for the Scheme at 5 April 2006 are to be calculated as the capital value of the prospective benefits arising from service completed before that date, assuming that members in active service cease service on that date. This method is known as the Defined Accrued Benefits Method.

At any subsequent date, once members' decisions regarding the option to choose a service credit under the 2006 Section of the Scheme are known, Technical Provisions are to be calculated as the capital value of the prospective benefits arising from service completed before that date, including allowance for prospective salary increases for those members in active service at that date. This approach is in line with the valuation method commonly known as the Projected Unit Method.

This method is consistent with that adopted for the previous valuation of the Scheme carried out as at 5 April 2003.

Assets

The value placed on the assets is the mid-market value, which is compatible with the Technical Provisions. This method is consistent with that adopted for the previous valuation of the Scheme carried out as at 5 April 2003.

Assumptions

The Trustee and the Company have agreed that the financial assumptions used to calculate the Technical Provisions as at 5 April 2006 will be those used for financial accounting purposes by ALSTOM Group as at 31 March 2006. Assessments of Technical Provisions at future dates will use the corresponding 'Accounting Assumptions' adopted by the ALSTOM Group at its year end accounting date coincident with or immediately preceding the valuation date, unless the Trustee and ALSTOM Limited agree otherwise.

Eliminating a shortfall

The Trustee and the Company have agreed that the funding shortfall identified as at 5 April 2006 should be eliminated over the period ending 5 April 2016 partly by the payment of additional contributions and partly by expected investment returns in excess of the discount rate.

The Trustee and the Company will initiate new discussions on the funding of the Scheme if the estimated deficit at any 31 March after 31 March 2007 lies outside a corridor 20% below or 15% above that expected based on the position at 31 March 2007.

Ongoing benefit accrual

The Trustee and the Company have agreed to adopt the Projected Unit Method to determine the cost of ongoing benefit accrual in respect of active members, using assumptions consistent with those used for determining Technical Provisions.

The resulting contribution rate will tend to increase over time as the flow of new entrants into the Scheme has ceased and the average age of the active membership might be expected to increase. However, this effect would normally be gradual over the next few years and, on this basis, the approach used is consistent with the statutory funding objective.

This method is consistent with that adopted for the previous valuation carried out as at 5 April 2003.

Description of the valuation method

The actuarial valuation involves projecting the benefits payable in future to members and their dependants under the Rules of the Scheme. In projecting these payments, assumptions are made about the likelihood of a benefit becoming payable at any future date (the demographic assumptions) and about members' future salary escalation and increases to pensions (financial assumptions).

In many respects the valuation is similar to an estimate of each future year's Scheme revenue account, based on the information available at the valuation date. It also includes assumptions about the future progress of the benefit outgo and the Scheme's income. However, if the results of these calculations were presented as a series of cash flows for each of the 70 or more future years in which they occur, it would not be readily apparent whether the Scheme's current and future resources were adequate to cover the expected benefits. In order to make a clear comparison between the expected outgo and income, each item of income and expenditure is discounted to the valuation date at the appropriate discount rate.

The valuation method used involves the separation of benefits earned to date (and the assets accumulated to cover those benefits) from benefits arising in respect of future service, and the valuation is made in three stages, which are described below.

Stage One - Past Service

The projected future payments arising from the accrued benefits at the valuation date are discounted to the valuation date using the discount rate. The resulting capital value of the liabilities is equivalent to the market value of the assets required to cover them.

The result of stage one is to calculate the amount of money (ie the past service liabilities or the *Technical Provisions*) which equals the present value of benefits arising in the future related to service up to the valuation date. If the assets equalled the past service liabilities it would be expected that there would be sufficient money to provide the accrued benefits as and when they fell due if the assumptions made were borne out in practice.

Stage one therefore establishes the extent of any imbalance between the amount of money required to provide benefits which have been accrued and the assets actually held at the valuation date. It should be noted that a level of 100% or more on this basis does not necessarily imply that the assets would be sufficient to secure the benefits with an insurance company in the event that the Scheme is wound up.

Stage Two - Normal Contribution Rate

The second stage is to calculate the normal future service contribution rate. This is the rate required to meet the cost of benefits of current employed members for service after the valuation date.

Under the method adopted, an average contribution rate is calculated which, expressed as a percentage of the Pensionable Earnings, would be adequate to meet the cost of benefits earned in the year following the valuation date.

In calculating the normal contribution rate, an appropriate allowance is made for the probability that the member remains in the Scheme until retirement, according to the chosen assumptions. The retirement pension payments are then discounted to the valuation date at the rate of return referred to above in order to arrive at the capital cost of normal retirement benefits. Benefits payable at other ages and in other circumstances are evaluated in a similar way according to the nature of the event giving rise to the benefit (death, leaving service or ill-health retirement).

Stage Three - Adjustments to Contribution Rate

The final stage is to adjust, for a temporary period, the normal contribution rate determined under stage two to allow for any imbalance (positive or negative) between the value of the accrued benefits and the market value of the accumulated assets, as disclosed by stage one. The pace at which a surplus or deficit is eliminated is a matter for agreement between the Trustee and the Principal Employer, and must be detailed in a *Recovery Plan* that the Trustees will submit to the Pensions Regulator.

Stability of contributions

The normal contribution rate will tend to increase over time as the flow of new entrants into the Scheme has ceased and the average age of the active membership might be expected to increase. However, this effect would normally be gradual over the next few years and, on this basis, the approach used is consistent with the statutory funding objective.

As with virtually all funding methods, the stability of the overall contribution is affected by any past service adjustments and volatility from this source may well exceed variations in the normal contribution rate. The actual effect on contributions depends on the period over which any imbalance revealed by Stage Two is to be rectified.

Discretionary Benefits

There are a number of areas where the benefits payable are subject to some exercise of discretion on the part of the Trustee and/or the Company, the principal details of which are set out below:

The Company may in some circumstances, after consulting the Actuary, direct the Trustee to

- substitute a pension for another benefit, or
- award a pension to a Member's dependant, or
- increase benefits payable or prospectively payable,

subject to the Company agreeing with the Trustee (after they have taken the advice of the Actuary) what additional contributions (if any) shall be payable by the Company to meet the cost of the relevant benefit.

Increases to retirement capital under the Retirement Capital Plan

Recent practice in relation to granting such discretionary benefits relates only to increases granted to the retirement capital built up under the Retirement Capital Plan. This discretion rests with the Company, not the Trustee.

Advance allowance is made in the funding arrangements for retirement capital under the Retirement Capital Plan to increase in future in line with annual increases in the Retail Price Index.

Other discretionary benefits

No advance allowance is made in the funding arrangements for the potential increase in the liabilities of the Scheme, or the potential contributions, arising from the exercise of any other such discretion.

Credited Interest

The Trustee, having obtained the advice of the Actuary and having consulted the Company, determines the rate of Credited Interest, subject to a minimum rate of 2.5% per annum.

No advance allowance is made in the Scheme's funding for a rate of Credited Interest in excess of 2.5% per annum.

G Financial assumptions

The Trustee (having taken the advice of the Actuary) and the Company have agreed assumptions for the investigation as at 5 April 2006, in line with the process described in the Statement of Funding Principles, as outlined in Appendix F. These assumptions are set out below.

Financial assumptions

The following table shows the financial assumptions underlying the calculation of the Technical Provisions as at 5 April 2006 and the ongoing contribution rate in relation to the future accrual of benefit. The corresponding assumptions adopted as at 5 April 2003 are shown for comparison.

	5 April 2006 % per annum	**5 April 2003 % per annum**
Discount rate	5.0	5.6
Price inflation (RPI)	2.5	2.3
Salary increases	3.5(1)	3.8
Pension increases in payment (for increases in line with RPI changes capped at 2.5% pa or 5% pa)	2.3	2.2
Increases to pensions in deferment	2.5	2.3

(1) This assumption is used for the future accrual of benefit only, as accrued leaving service benefits have been valued for those active members in pensionable service on 5 April 2006

Investment return underlying the Recovery Plan to eliminate the shortfall as at 5 April 2006

The Trustee and the Company have agreed that the funding shortfall identified as at 5 April 2006 should be eliminated partly by the payment of additional contributions and partly by expected investment returns in excess of the discount rate over the period ending 5 April 2016. The required investment return to eliminate the deficit by 5 April 2016 is 3.2% per annum above RPI, after allowing for following expenses met directly by the Scheme:

- Investment management costs are assumed to be met out of future investment income.
- The Company will meet certain administrative and non-investment expenses directly. To the extent (if any) that the Company does not directly meet the Scheme's expenses they will be met out of the resources of the Scheme. The investment returns on the Scheme's assets are therefore assumed to exceed the discount rate by sufficient margin to meet any such expenses. There is no allowance in the Scheme's Technical Provisions for these expenses and the future service contribution rate does not include any allowance for expenses.

H Demographic assumptions

The demographic assumptions agreed between the Trustee and the Company for assessing the Scheme's Technical Provisions are summarised below.

In service – Specimen rates (future service only)

Sample rates per 1,000 members at each age

	Withdrawal		Death		Retirement through incapacity		Retirement not through incapacity	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
20	100	150	0	0	0	0	0	0
25	150	200	0	0	0	0	0	0
30	100	150	0	0	0	0	0	0
35	80	120	0	0	0	0	0	0
40	60	90	0	0	1	1	0	0
45	40	60	1	1	1	1	0	0
50	20	20	1	1	3	3	15	60
55	15	15	2	2	6	6	33	60
60	15	0	4	3	13	13	100	982
64	15	0	6	4	17	17	300	0
65	0	0	0	0	0	0	0	0

Retirement from active service (past service)

All active members are assumed to retire at Normal Retirement Date with the exception of ABB and Basis 4 members, who are assumed to retire at age 60 with no early retirement reduction applied.

Retirement from active service in ill health (past service)

No allowance.

Retirement from deferred pensioner status

All deferred pensioners are assumed to retire at Normal Retirement Date with the exception of Basis 4 members.

Mortality for non-active members

Assumed to follow standard tables PA00 with a +1.5 years age rating and projected from calendar year 2000 in line with the medium cohort improvement rates related to the standard PA92 tables.

Spouses' and dependants' pensions

The proportion of members assumed to be married is in accordance with an age-related table. At age 65, the proportion is approximately 85% for men and 60% for women.

Age difference between members and dependants

The age difference (husband's age minus wife's age) is assumed to range between 0 and 3 years depending on age.

Allowance for option of members to commute pension for cash at retirement

No explicit allowance.

Changes to the assumptions used since the previous valuation report

The demographic assumptions adopted for this valuation are, with the exception of the mortality assumption and age-by-age salary scale, identical to those adopted at the previous valuation. As described in paragraph 2.9, for the purposes of valuing past service benefits for active members we have calculated the value of their deferred benefits assuming that they ceased service at the valuation date. When valuing future service benefits for this valuation, the age-by-age salary scale adopted for the previous valuation has been removed because of the different definition of Pensionable Earnings under the 2006 Section.

Intervaluation experience

The Trustee's decision to calculate the Scheme's Technical Provisions based upon the above assumptions relied, inter alia, upon advice they received from me about the experience of the Scheme and other similar arrangements over the period since 5 April 2003 and general expectations about how these might develop in the future.

At successive valuations, Scheme experience since the previous valuation is analysed, as far as the available data permits, to see whether changes need to be made to those assumptions. My investigations of the Scheme's experience in the three year period to 5 April 2006 showed that:

- Actual pensionable salaries as at 5 April 2006 were 102% of those expected under the assumptions adopted for the 5 April 2003 valuation, with a fairly stable pattern when analysed by age. This suggests that the 2003 valuation assumption was reasonable. However, the definition of pensionable pay under the 2006 Section is in terms of basic pay rather than gross earnings, and so the historic pattern of gross pay increases may not be an appropriate guide to basic pay increases going forward. It was decided to adopt a salary increase assumption of 1.0% pa above inflation (a reduction of 0.5% pa compared with the 5 April 2003 assumption) and to remove the salary scale adopted for the previous valuation.
- The overall pensioner mortality rates experienced, when weighted by pension amounts, were similar to the assumption adopted as at 5 April 2003. There was no evidence of further improvements in pensioner mortality, when weighted by

pension amounts, than that assumed as at 5 April 2003, although this is not what is typically being seen in other large schemes. The shape of the latest mortality tables – the "00 Series" – gives a better fit of current mortality rates than the assumption adopted as at 5 April 2003. The Scheme has many pensioners in the 'healthy' cohort, which is experiencing faster-than-anticipated improvements in mortality rates. It was decided to adopt the latest "00 Series" tables and make an allowance for future improvements in mortality in line with the 'medium cohort' mortality improvements described in CMI working paper 1, although the change in the liabilities resulting from this change is not significant.

In respect of other assumptions, the differences between actual experience and the assumptions adopted for the last valuation were not sufficient to warrant a change in demographic assumptions at this valuation,. It will, however, be important to take these observations into account at the next valuation to investigate the development of any trends.

I Statutory certificate

Actuarial certification for the purposes of regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Name of scheme: **ALSTOM Pension Scheme**

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 5 April 2006 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Scheme set out in the Statement of Funding Principles dated 5 April 2007.

I R Skinner

I R Skinner
Fellow of the Faculty of Actuaries

Watson Wyatt Limited
Watson House
London Road
Reigate
Surrey
RH2 9PQ

5 April 2007

J Limitations of the investigation

Third parties

I have written this Report for the Trustee of the Scheme and the Company as required under General Rule 22. I have prepared it to satisfy the requirements of the Deed and Section 224 of the Pensions Act 2004. It has not been prepared for any other purpose. As such, it should not be used or relied upon by any other person for any other purpose, including, without limitation, by individual members of the Scheme for individual investment or other financial decisions, and those persons should take their own professional advice on such investment or financial decisions. Neither I nor Watson Wyatt Limited accepts any responsibility for any consequences arising from any third party relying on this Report.

This Report is based on data available to me as at the effective date of the valuation and takes no account of developments after that date except where explicitly stated otherwise.

Except with the prior written consent of Watson Wyatt Limited, the recipient may not reproduce, distribute or communicate (in whole or in part) this Report to any other person other than to meet any statutory requirements.

Information supplied

The Trustee bears the primary responsibility for the accuracy of the information provided, but will, in turn, have relied on others for the maintenance of accurate data, including the Company who must provide and update the membership information. Nevertheless it is the Trustee's responsibility to ensure the adequacy of these arrangements. I have taken reasonable steps to satisfy myself that the data provided is of adequate quality for the purposes of the investigation, including carrying out basic tests to detect obvious inconsistencies. These checks have given me no reason to doubt the correctness of the information supplied. It is not possible, however, for me to confirm that the detailed information provided, including that in respect of individual members and the asset details, is correct.

Assumptions

The investment and economic assumptions used to determine the likely future development of the Scheme's funding level have been based on the Watson Wyatt asset model which makes assumptions on future investment returns on each asset class. These represent our views only and they inevitably contain an element of subjective judgement; others may have different opinions. The assumptions (both demographic and financial) and the analysis in this Report are intended to be reflective of the likely behaviour of the finances of the Scheme over the long term, but there is no guarantee that any of the assumptions made will be borne out in practice. In actuality, the Scheme's experience will, from time to time, be better or worse than that assumed.

The assumptions made about future financial and demographic conditions are precisely that; they are assumptions, and not predictions or guarantees. We believe that they provide a reasonable basis on which the Trustee and the Company may formulate their policy, but they must be aware that there are uncertainties and risks involved in any course of action.

The choice of assumptions is the responsibility of the Trustee, in agreement with the Company, having taken my advice.

Asset model

The structure of the Watson Wyatt asset model is based on historical analysis of investment returns, although Watson Wyatt has incorporated its subjective judgement to complement the information provided by historical returns. The model is designed to illustrate the future range of returns stemming from different asset classes and their inter-relation. It should be noted that no economic model could be expected to perfectly capture future uncertainty, particularly the risk of extreme events.

Liability projection

This is based on generally accepted actuarial techniques. The Scheme's current investment strategy means that a high proportion of the investments are held in return-seeking assets such as equities and property. It is therefore possible that the difference between the value of the assets and the Scheme's accrued liabilities could vary significantly from time to time, depending on relative investment market movements. The results reported in this report should not, therefore, be taken as an indication of the Scheme's financial position on any date other than 5 April 2006.

Legislation

The future actuarial treatment of assets, liabilities and their consequences (eg future contribution requirements, or balance sheet implications) have been modelled in a consistent manner to the current prevailing regulations (unless stated explicitly to the contrary in this Report). For this reason changes to the rules governing pension funds could well have a significant impact on the analysis and also the conclusions emanating from this valuation.