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Scheme Funding Report

31 March 2019

Sellafield Section of the Combined Nuclear Pension Plan

09 October 2020

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Scheme Funding Report 31 March 2019
Sellafield Section of the Combined Nuclear Pension Plan

Deloitte Total Reward and Benefits Limited
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Contents

1 Introduction

This report has been prepared for the Trustee of the Sellafield Section of the Combined Nuclear Pension Plan (the "Section") at their request and sets out the results of the actuarial valuation at 31 March 2019

The purposes of this report are to determine:

- whether the Section had sufficient assets to meet its Technical Provisions (i.e. the Trustee's funding objective);
- the solvency position of the Section; and
- the position on a s179 basis.

Separately I have provided advice to the Trustee to assist in the review of the Statement of Funding Principles, Schedule of Contributions and Recovery Plan.

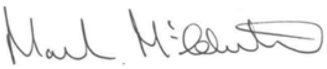
This report builds on:

- My advice on the;
  - demographic assumptions in my paper for the Trustee meeting held on 11 July 2019;
  - Pensionable Earnings assumption in my paper for the Trustee meeting held on 16 September 2019;
  - Financial assumptions in my papers for the Trustee meetings held on 12 February 2020, 2 April 2020 and 12 May 2020.
- The results paper provided for the Trustee meetings held on
  - 12 February 2020;
  - 2 April 2020; and
  - 12 May 2020.
- The Statement of Funding Principles, Schedule of Contributions, and Recovery Plan each dated 27 August 2020.

This report has been prepared in accordance with Technical Actuarial Standards 100 (Principles for technical actuarial work) and 300 (Pensions) issued by the Financial Reporting Council, and peer reviewed in accordance with Actuarial Professional Standard X2.

This report may not be relied on for any purpose other than those explained above. The funding valuation is not relevant for any other purposes, and in particular is not relevant to the costs and liabilities of the Section to be disclosed by the Employer in its accounts.

A glossary of defined terms can be found in the Glossary in Appendix K.

Signature	**Date**
	09 October 2020
Name	**Qualification**
Mark McClintock	Fellow of the Faculty and Institute of Actuaries

2 Summary of results

At the Valuation Date, there was a deficit of £122,121,000. This is a deterioration since the last valuation when the deficit was £25,844,000.

The Trustee's funding objective in its Statement of Funding Principles is to hold sufficient and appropriate assets to cover its Technical Provisions.

The table below sets out the funding position at 31 March 2019 compared to the position three years earlier.

The Technical Provisions have been calculated using assumptions agreed between the Trustee and the Employer and documented in the Statement of Funding Principles.

£000's	31 March 2019	31 March 2016
Assets	1,385,295	855,586
Technical Provisions		
- Active members	1,278,890	777,182
- Deferred members	51,651	31,470
- Pensioner members	176,875	72,778
- Expenses		
Total Technical Provisions	1,507,416	881,430
Surplus/(Deficit)	(122,121)	(25,844)
Funding level	92%	97%

As there is a deficit, a Recovery Plan has been agreed between the Trustee and Employer to pay the following Deficit Reduction Contributions.

Deficit Reduction Contributions	Payment amount £000's p.a.
31 March 2019 to 31 March 2021	-
1 April 2021 to 31 March 2032	19,920

In respect of future service, the following contribution rates have been agreed:

Future contributions	1 April 2019 to 31 March 2021 % Pensionable Earnings	From 1 April 2021 % Pensionable Earnings
Employer contribution rate	25.2%	32.1%
Member contributions rate	5%	5%

The Employer also pays the expenses of operating the Section.

If experience is in line with the Technical Provisions assumptions, the Section's assets deliver the return assumed in the Recovery Plan, and contributions are paid in line with the Schedule of Contributions, I estimate that the funding level at the date of the next valuation at 31 March 2022 will be 90%. There is expected to be a small deterioration from the position at 31 March 2019 due to the underpayment against the cost of accrual up to the point the future service contributions change on 1 April 2021. This underpayment will be recovered as part of the Recovery Plan. However, the position is inherently uncertain and I would expect the funding position to be volatile due to (i) the exposure to growths assets and (ii) difference in inflation and interest rate sensitivity of the assets and liabilities.

3 Experience since the last valuation

The key reasons for the change in funding position are:

- A decrease in government bond yields and an increase in inflation expectations that have resulted in a lower discount rate, higher inflation assumptions and an increase in the Technical Provisions
- Contributions in respect of future accrual have been less than the cost of the benefits accrued
- Pensionable Earnings increases have been higher than assumed.

The impact of these factors have been offset by:

- Investment performance of the Section's assets has been better than expected
- Changes in the derivation of the financial assumptions to take into account the long-term expected rate of return on the Section's assets has produced a higher discount rate.

Over the inter-valuation period the following contributions have been paid, in line with the previous Schedule of Contributions:

£000's	Employer contributions	Employee contributions
Year 1	69,228	16,364
Year 2	67,042	15,234
Year 3	76,042	15,502
Total	**212,312**	**47,100**

The annual investment return on the Section's assets equated to approximately 9.7%.

The Section has become increasingly mature based on membership numbers, with 7% of members now deferred and 25% pensioners, compared to 7% and 15% at the last valuation.

Over the inter-valuation period the deficit has increased from £25,844,000 to £122,121,000. There have been no significant events over this period which materially impact the funding position of the Scheme.

		£000's
Surplus/(Deficit) at 31 March 2016		**(25,844)**
Interest on the surplus/(deficit)		(3,940)
Investment returns above/(below) expected		162,051
Cost of accrual vs. future service contributions		(56,822)
Change in market conditions		(437,812)
Changes to Statement of Funding Principles		283,925
Salary increases		(51,598)
Pension increases (in payment and deferment)		(59)
Experience		7,978
Surplus/(Deficit) at 31 March 2019		**(122,121)**

GMP equalisation

On Friday 26 October 2018, the High Court ruled in the Lloyds Banking Group case that schemes must equalise benefits for the differences in Guaranteed Minimum Pensions (GMPs) between men and women. GMPs were earned until April 1997 in schemes that were "contracted out" of the SERPS state pension.

On 17 May 1990, the judgment in the "Barber" court case ruled that pensions provided by schemes had to be equalised between men and women going forward; from that date, schemes had an obligation to provide men and women with a pension that was payable from the same Normal Retirement Age. However, the GMP element of the overall pension continued to be payable from different ages in accordance with the Government's prescribed approach to calculating GMP.

The Lloyds Bank judgment means that schemes now also need to equalise benefits for the differences in GMP. The judgment applies to GMP earned between 17 May 1990 (the date of the Barber judgment) and 5 April 1997 (when GMP accrual ceased).

The main implication of the court ruling will be to increase the liabilities in respect of pension payments going forward and arrears for pensions paid in the past. The Section does not have any GMP and is not affected by GMP equalisation.

4 Risk and uncertainty

The funding position of the Section is exposed to a number of risks, which are managed and monitored by the Trustee

To the extent that these risks appear, this will cause volatility in the funding position of the Section, and could mean that additional (or lower) contributions are needed to fund the Section.

Covenant risk: A reduction in the strength of the covenant leads to an increased risk that the Employer will not be able to make good any deficit that may emerge in the future or the risk that the Employer will not be able to pay the expenses associated with the day to day running of the Section. In the event that the financial strength of the Employer becomes weaker, the Trustee will need to consider whether the level of investment risk in the Section is appropriate for the reduced covenant strength, and the affordability of the contributions for the Employer.

The Trustee regularly monitors the strength of the covenant. The Trustee have considered the extent of the NDA and UK Government's legal obligations to the section of the Plan, and have agreed with the Covenant advisors that it is reasonable to treat the NDA and Site License Companies as "quasi-sovereign".

Investment risk: The investment strategy has an exposure to higher risk growth assets (i.e. a growth portfolio of c. 85% of assets). By taking additional investment risk, investors in growth assets expect to be compensated with higher longer-term returns than matching assets. In the shorter term, the price of growth assets is expected to be more volatile than matching assets. In the event of falling growth asset prices, this could lead to an emerging deficit that will need to be funded by the Employer.

The Trustee regularly considers the appropriateness and inherent risks of the investment strategy in co-ordination with their investment consultant

Interest rate and inflation risk: To the extent that there is a mismatching of the interest rate or inflation sensitivity of the assets and liabilities, either a surplus or deficit may arise when interest rates and inflationary expectations change.

The Section's assets are expected to hedge c. 29% of interest rate risk.

Longevity risk: There is a risk that members live longer than anticipated, and therefore the cost of providing the benefits is higher than expected.

The Section does not hold assets to hedge longevity risk. To the extent that members live longer than expected, this could lead to an emerging deficit in future. The proposed assumptions include a deliberate margin for prudence to help protect against this risk. As Scheme Actuary I regularly keep the Trustee updated on developing trends in longevity

Member selection risk: There is a risk that member experience is not as expected e.g. members do not commute pension at retirement for a cash lump sum.

The Trustee reviews experience at each actuarial valuation, and any significant deviations from the assumptions are reflected in my proposed assumptions for the actuarial valuation

Legislative risk: There is a risk that new legislation or court rulings could change the benefits that must be paid to members and/or the way in which these benefits must be funded.

As Scheme Actuary, I keep the Trustee up to date on changes in legislation which may impact funding levels and the cost of benefits

The Trustee is aware that the only way to remove all risks is to secure all the liabilities with an insurance company.

5 Sensitivities

The results of the funding valuation are sensitive to the choice of assumptions

Change to assumption	Change in Technical Provisions (£000's)	Surplus / (Deficit) (£000's)
Technical provisions at 31 March 2019	-	(122,121)
0.5% pa decrease in the discount rate	195,454	(317,575)
0.5% pa increase in the RPI inflation assumption (and corresponding increase to other inflation-linked assumptions)	185,704	(307,825)
10% reduction to the mortality scaling factors	32,609	(154,730)
Impact of increasing long-term trend rate in future improvements in mortality by 0.25% pa	15,313	(137,434)
10% fewer members commute the maximum amount pension at retirement.	6,404	(128,525)

The scenarios considered are not worst or best case scenarios, and have been applied in isolation. The solvency position discussed in Section 6 is also highly sensitive to all but the last of the factors outlined above.

6 Solvency position

At the Valuation Date, I estimate that the Section was 44% funded on a solvency basis

This is a comparison of the value of the assets with an estimate of the cost of winding up the Section and purchasing annuities from an insurance company which would be sufficient to meet the accrued liabilities in full.

I have estimated the cost of annuities using assumptions that I understand are similar to those used by insurance companies at the Valuation Date. These assumptions are more conservative than those used to calculate the Technical Provisions, and include an explicit allowance for expenses, leading to a higher liability value.

£000's	31 March 2019	31 March 2016
Assets	1,385,295	855,586
Solvency liabilities		
- Active members	2,669,919	2,208,152
- Deferred members	124,371	95,085
- Pensioner members	285,084	107,806
- Expenses	92,381	72,331
Total solvency liabilities	3,171,755	2,483,374
Surplus/(Deficit)	(1,786,460)	(1,627,788)
Funding level	44%	34%

The estimate above must be viewed only as a guide. The actual solvency position could only be established by obtaining quotes from insurers, and the cost is likely to vary between insurers.

The estimated solvency funding level at the previous valuation date was 34%. The improvement was due to strong investment performance and a change in the derivation of the assumptions as insurers' pricing basis is less expensive that that assumed at the 31 March 2016 actuarial valuation.

If the Section is wound up, the Section would have insufficient assets to secure benefits in full without additional funding from the Employer. If the Employer is not able to make those payments and becomes insolvent, the Section may be eligible for compensation from the PPF, if the Section's assets could not secure at least the PPF level of compensation from an insurer.

If experience is in line with the solvency assumptions, the Section's assets deliver the return assumed in the Recovery Plan, and contributions are paid in line with the Schedule of Contributions, I estimate that the solvency level at the date of the next valuation at 31 March 2022 would be 46%.

7 s179 valuation

At the Valuation Date, I estimate that the Section was 73% funded on a s179 basis

It is requirement for schemes to carry out a s179 valuation at least every 3 years, and the results submitted to the Pension Protection Fund ("PPF") via Exchange. The purpose of the valuation is to determine the risk-based part of the PPF levy that is payable in future years.

The most recent s179 valuation of the Section was carried out at 31 March 2016. I have performed the valuation at 31 March 2019, to coincide with the date of triennial funding valuation, and have prepared the necessary certificate, which is contained in Appendix J.

£000's	31 March 2019	31 March 2016
Assets	1,385,295	855,586
S179 liabilities		
- Active members	1,601,055	1,020,707
- Deferred members	70,400	42,325
- Pensioner members	190,569	76,336
Expenses - On Windup - Installation & Payment	 20,120 8,488	 12,894 8,747
Total S179 liabilities	1,890,632	1,161,009
Surplus/(Deficit)	(505,337)	(305,423)
Funding level	73%	74%

The approach for carrying out a s179 valuation is prescribed by the PPF. The in force valuation guidance at the valuation is version G8, using the assumptions contained in assumptions guidance version A9 using market conditions as at the Valuation Date.

8 Developments since the valuation and next steps

There has been considerable market volatility since the Valuation Date and this is likely to continue given the effect of Covid-19 on the global economy.

Developments since the valuation

Since the Valuation Date, equity markets have fallen significantly due to the Covid-19 pandemic and the effect on the economy. There has been some recovery in equity values but asset prices remain below their position at the Valuation Date.

Gilt yields and inflation expectations have also fallen. The net impact on the funding position will depend on how the fall in gilt yields has affected the long-term expected return on the Section's assets.

The Trustee should consider whether the market volatility or any changes to the employer covenant will warrant revisiting the Statement of Funding Principles. However, despite the impact of the post valuation experience, I do not recommend that the next actuarial valuation date is brought forward from 31 March 2022 unless there has been a material impact in the employer covenant.

Next steps

Following receipt of this report the Trustee should:

- Send a copy of this report to the Employer within 7 days;
- Submit the results and Recovery Plan to the Pensions Regulator (already completed); and
- Provide a summary funding statement to members within a reasonable period.

An actuarial update of this valuation is due with an effective date of 31 March 2020, and the next full actuarial valuation is due at 31 March 2022.

The Pensions Regulator expects the Trustee to act as unsecured creditors of the Employer and therefore the Trustee should monitor the activities of the Employer that may impact upon its ability to fund the Section and hence the security of members' benefits.

The Trustee should regularly monitor the strength of the covenant of the Employer to their pension scheme, particularly in light of the current economic climate.

Appendices

A Funding approach and assumptions

The Trustee has selected the Projected Unit funding method, which is an accrued benefits funding method.

The Trustee and Employer have selected the assumptions below, which are shown against those chosen by the Trustee at the previous valuation. These assumptions have been documented in the Statement of Funding Principles.

Technical Provisions	31 March 2019	31 March 2016
Discount rate	3.60% p.a.	Pre-retirement: 5.00% p.a. Post-retirement: 3.10% p.a.
Discount rate – future service	4.00% p.a.	6.20% p.a.
Retail Prices Index (RPI) inflation	3.30% p.a.	3.05% p.a.
Consumer Prices Index (CPI) inflation	2.30% p.a.	2.05% p.a.
Salary increases	Years 1-10: CPI + 0.25% Over 10 years: CPI + 0.75% Plus promotional salary scale	Year 1: 0.25% Year 2: 1.5% Years 3&4: 1.0%, then CPI (2.05%) for 10 years, and CPI + 0.5% (2.55%) thereafter. Plus promotional salary scale
Inflation-linked pension increases in payment	3.30% p.a.	3.05% p.a.
Post-retirement mortality	110% SAPS S3 All Pensioners YoB and CMI 2018 projections with a long term trend of 1.5% p.a.	100% SAPS S2 All Pensioners YoB and 2015 CMI projections with a long term trend of 1.25% p.a.
Pre-retirement mortality	Same as post-retirement mortality	Same as post-retirement mortality

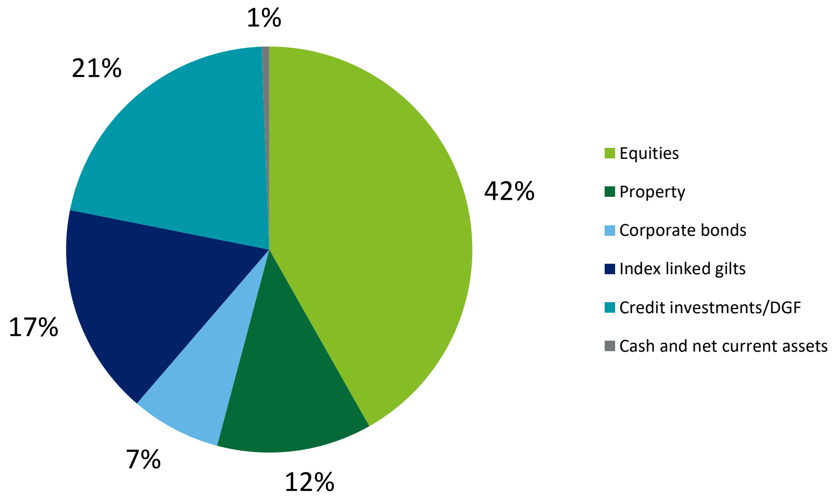
Technical Provisions	31 March 2019	31 March 2016
Retirement	Age 60 or 65 as applicable to specific members	Age 60 or 65 as applicable to specific members
Withdrawal from active service	Withdrawal scale applied	Withdrawal scale applied
Proportion married	Based on scheme specific experience	Based on scheme specific experience
Age difference	Males 3 years older than females	Males 3 years older than females
Cash commutation	80% of members assumed to commute the maximum amount of tax free cash	81% max of members assumed to commute the maximum amount of tax free cash
GMP equalisation	None	None
Expenses	No allowance	No allowance

My estimate of the solvency position was based on the following assumptions:

Solvency	31 March 2019	31 March 2016
Discount rate	BoE 20 year gilt yields for post retirement and less 0.5% for pre retirement at all durations Pre-retirement 1.10% Post retirement 1.60%	BoE 20 year gilt yields less 0.5% for pensioners and less 1.0% for non-pensioners at all durations Non-pensioners 1.30% Pensioners 1.80%
Retail Prices Index (RPI) inflation	BoE 20 year spot rate 3.60%	BoE 20 year spot rate 3.25%
Consumer Prices Index (CPI) inflation	Equal to RPI inflation	Equal to RPI inflation
Inflation-linked pension increases in payment and in deferment	No reduction from assumed RPI inflation rate 3.60% p.a.	No reduction from assumed RPI inflation rate 3.25% p.a.
Post-retirement mortality	90% of S3PxA tables, CMI 2018 projections with a 2.0% long term rate of improvement	90% of S2PxA tables, CMI 2014 projections with a 2.0% long term rate of improvement
Pre-retirement mortality	Same as post-retirement mortality	Same as post-retirement mortality
Retirement	Age 60 or 65 as applicable to specific members	Age 60 or 65 as applicable to specific members
Proportion married	Based on scheme specific experience	85%
Age difference	Males 3 years older than females	Males 3 years older than females
Cash commutation	No allowance	No allowance
GMP equalisation	None	None
Expenses	3% of liabilities	3% of liabilities

B Assets

I have used an asset value of £1,385,295,000. This is based on the audited value in the Trustee's Report and Accounts, excluding Defined Contribution assets.



The asset allocation is consistent with the investment strategy set out in the Statement of Investment Principles. At the Valuation Date, the Section had a target allocation of 85% in Growth assets and 15% in Bond assets.

C Membership data

The calculations have been based on individual membership data as at 31 March 2019 provided by the administrator EQ.

I have not audited the data, but I have taken reasonable steps to satisfy myself that the data is of adequate quality for the purpose of the valuation. I am satisfied with the internal consistency of the data, but cannot accept any responsibility for errors or omissions in the underlying data.

Deferred pensions are shown at date of leaving, and average ages are weighted by pension.

Active	31 March 2019	31 March 2016
No. members	6,113	7,056
Total pensionable salary	£303,484,000	£326,180,000
Average age	48.4	46.8

Deferred	31 March 2019	31 March 2016
No. members	651	616
Total deferred pension	£1,518,000	£1,206,000
Average age	47.4	45.4

Pensioners and dependants	31 March 2019	31 March 2016
No. members	2,198	1,333
Total pensions in payment	£6,442,000	£2,527,000
Average age	61.7	61.5

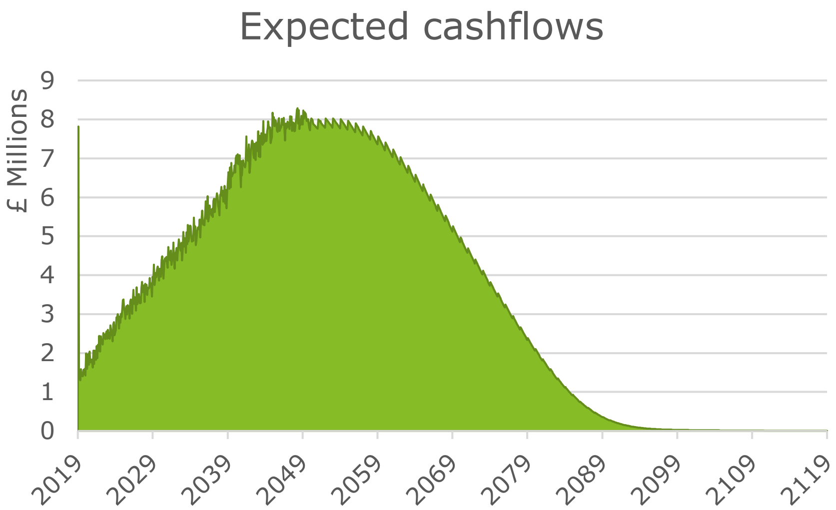
The membership numbers above vary slightly from those outlined in the audited Trustee’s Report and Accounts as at 31 March 2019 due to membership movements that occurred around the Valuation Date.

D Expected cashflows

In order to calculate the Technical Provisions, the benefits paid out by the Section are estimated for each year into the future. A present value is then placed on the estimated benefit payments using the discount rate.

Since these cashflows are in respect of pension payments to be made over many years into the future, they are long term and uncertain in nature.

The chart below shows the expected future monthly cashflows out of the Section from 31 March 2019.



E Benefit summary

This Report has been based upon benefits described in the Trust Deed and Rules.

Except where stated in the Report, no allowance has been made for any discretionary benefits or discretionary increases to benefits.

F Certificate of Technical Provisions

Name of Section: Sellafield Section of the Combined Nuclear Pension Plan

I certify that, in my opinion, the calculation of the Section's Technical Provisions as at 31 March 2019 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 Section and set out in the Statement of Funding Principles dated 27 August 2020.

Signature	
Name	Mark McClintock
Date	30 September 2020
Name of employer	Deloitte Total Reward and Benefits Limited
Address	Lincoln Building, 2-45 Great Victoria Street, Belfast, BT2 7SL
Qualification	Fellow of the Institute and Faculty of Actuaries

G Statement of Funding Principles

Statement of Funding Principles

Sellafield Section of the Combined Nuclear Pension Plan

As part of the actuarial valuation of the Sellafield Section ("the Section") of the Combined Nuclear Pension Plan ('the Plan') as at 31 March 2019, the Trustee has reviewed their Statement of Funding Principles. The statement has been updated to reflect:

- the Trustee's assessment of the Lead Employer (Nuclear Decommissioning Authority) covenant;
- changes in financial market conditions; and
- demographic publications since the last actuarial valuation as at 31 March 2016.

This statement, dated 27 August 2020, has been agreed between the Trustee of the Scheme and the Lead Employer as required by section 223 of the Pensions Act 2004.

The actuarial valuation of the Plan as at 31 March 2019 will be carried out on the basis of these principles.

The Trustee took advice from the Scheme Actuary, Mark McClintock FIA, before drafting this statement.

The statutory funding objective

This statement sets out the Trustee's policy for ensuring that the Statutory Funding Objective[1] is met.

The Trustee will carry out their obligations under the Pensions Act 2004 and this Statement of Funding Principles. They will hold discussions with the Lead Employer to obtain agreement to this statement and any changes to it. Assumptions will be selected to be sufficiently prudent to ensure that both pensions and benefits already in payment to beneficiaries will continue to be paid, and to reflect the commitments which arise out of all members' accrued rights.

The assumptions selected will provide an approximate margin for adverse deviation, taking into account any expected changes in the relevant risks, in particular the risks that, for whatever reasons, the Employer may not be able to pay contributions or make good deficits on time. This may be related but not restricted to the following risks:

- the investments under-perform;
- the investments do not otherwise increase in line with the liabilities;
- inflation rates are higher than expected; and
- retired members live longer than anticipated

Funding objectives in addition to the statutory funding objective

The Plan has no funding objectives other than the statutory funding objective described above.

1 The Statutory Funding Objective is defined in Section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover its Technical Provisions.

Method and assumptions to be used in calculating the Plan's Technical Provisions

Method

The Section's Technical Provisions will be calculated, as required by the Pensions Act 2004, using an "accrued benefits funding method", and the method used is the Projected Unit Method with a 3 year control period, building an allowance for future assumed pay increases into the past service liabilities.

This method is considered appropriate for a scheme which provides benefits calculated on a final pay basis. As the Section is closed to defined benefit new joiners, it is recognised by the Trustee and the Lead Employer that using a control period of this length will almost certainly result in an increase in the contribution rate at future valuations.

Assumptions

The principal assumptions used in calculating the Technical Provisions will be determined as outlined below. Alongside each assumption we show the figure used in the valuation as at 31 March 2019. These figures have been derived from market rates as at the valuation date.

Assumption	Derivation	Assumption used
Discount rate	The assumption for past service liabilities is based upon the expected return on the proposed long term investment strategy with a margin for prudence such that the funding target is expected to be met with at least 2/3rds probability. The investment strategy will take account of the duration of the liabilities. The expected returns for each asset class are set using the investment consultant's model and will be reviewed on a regular basis. The assumption for future service liabilities will be set in a similar manner, but based on a longer investment timeframe to reflect the longer duration of the active members' liabilities relative to the Section as a whole.	**3.60% p.a.** **Future service: 4.00% p.a.**
RPI Inflation	The assumed rate of RPI price inflation will be assessed by reference to the Bank of England's UK implied inflation spot curve data (using duration appropriate to the Section's liabilities). An adjustment could be considered to allow for a possible inflation risk premium, reflecting the high demand for index linked gilts distorting the Bank of England's market based calculation.	**3.30% p.a.** (being 0.30% below the Bank of England data at a 20 year duration, the deduction being to allow for inflation risk premium)
CPI Inflation	Assessed by the rate of RPI inflation less a deduction to take account of the differences in the method of calculation, goods covered in the indices and the historical rates of RPI and CPI inflation.	**2.30% p.a.** (being 1.00% p.a. below the RPI inflation assumption)

Assumption	Derivation	Assumption used
Increases to Pensionable Earnings	Pensionable Earnings will be assumed to increase relative to the assumed rate of CPI inflation, by an amount based on an experience analysis conducted for the 31 March 2019 valuation. Views from the Employer and the Lead Employer will be considered when setting the assumption.	**Years 1-10: CPI + 0.25%** **Over 10 years: CPI + 0.75%** **Plus promotional salary scale (see Appendix)**
Increases to pensions in payment and revaluation of deferred pensions	An adjustment could be considered to the assumption for price inflation when looking at RPI inflation-linked pension increases or revaluation.	**3.30% p.a.** (no reduction from assumed RPI inflation rate)
Mortality	Standard published tables of mortality would be adopted that are considered appropriate for the Plan based on relevant analysis of experience. These tables would be adjusted to allow for expected future improvements in longevity.	**110% SAPS S3 All Pensioners YoB and CMI 2018 projections with a long term trend of 1.5% p.a.**
Leaving service	Advice will be taken from the Scheme Actuary as to the appropriate withdrawal rates to adopt taking into account withdrawal experience from the Plan and the views of the Lead Employer.	**See sample rates in the Appendix**
Ill health	Advice will be taken from the Scheme Actuary as to the appropriate ill health rates to adopt taking into account the experience from the Plan and the views of the Lead Employer.	**See sample rates in the Appendix**
Retirement	Members are assumed to retire at their Normal Pension Age. No account has been taken of the possibility of members continuing to work after Normal Pension Age but this may be reviewed in future, taking account of the Plan's experience and the views of the Lead Employer.	**Age 60 or 65 as applicable to specific members**
Age differences	Advice will be taken from the Scheme Actuary as to the appropriate age difference between spouses to adopt, taking into account experience of the Plan where plausible and the views of the Lead Employer.	**Husbands assumed to be 3 years older than their wives**
Proportion married	Advice will be taken from the Scheme Actuary as to the appropriate proportions married to adopt, taking into account the experience analysis of the Plan.	**NDA Unisex rates** **Sample rates are shown in the Appendix**
New entrants	The Section of the Plan is closed to defined benefit new entrants.	**No allowance**
Commutation	The assumption is informed by recent experience.	**80% of members assumed to commute the maximum amount of tax free cash**

Assumption	Derivation	Assumption used
Expenses	Expenses are paid directly by the Employer.	**Paid directly by Employer**
Life insurance premiums	Death in service lump sums are self-insured for this Section, the cost of which is met by the Employer.	**Included in employer contribution rate**
PPF and other levies	Paid directly by the Employer.	**Paid directly by Employer**
Assets	Market value taken from audited accounts (excluding members' money purchase AVC and Shift Pay Pension Plan).	**Market value**

Period within which and manner in which a failure to meet the statutory funding objective is to be rectified

The Trustee and the Lead Employer have agreed that any funding shortfalls identified at an actuarial valuation should be eliminated by the payment of additional contributions. The level and period over which these additional contributions are to be paid will be agreed between the Trustee and the Lead Employer. In determining the actual recovery period at any particular valuation, the Trustee will take into account the following factors:

- the size of the funding shortfall;
- the business plans of the Employer;
- the Trustee's assessment of the financial covenant of the Lead Employer (and in making this assessment the Trustee may make use of appropriate credit assessment providers or financial advisors);
- any contingent security offered by the Employer; and
- the Rules of the Plan.

The assumptions to be used in these calculations will be those set out above for calculating the Technical Provisions except that they may also take account of the expected investment out-performance of Plan assets.

Other contributors

There are no agreements at present for anyone other than the Employer to make contributions.

Policy on discretionary increases and funding strategy

No allowance has been included in the assumptions for paying discretionary benefits or making increases to benefits that are not guaranteed under the Plan.

The Trustee will not agree any benefit increase unless a specific payment is made to the Plan in respect of such an increase, or the Scheme Actuary advises that such increases can be met by any surplus held in the relevant Section.

Refund to the Employer

The Trust Deed permits refund of surplus monies to any or all of the employers who participate in the Plan, but only on the winding up of the Plan as a whole and if then the assets exceed the cost of buying out the benefits of all the beneficiaries from an insurance company.

Policy on reduction of cash equivalent transfer values (CETVs)

At each valuation, the Trustee will ask the Scheme Actuary to report on the extent to which assets are sufficient to provide CETVs for all members. If the assets are insufficient to provide 100% of benefits on that basis, so that payment of full CETVs would adversely affect the security of the remaining members' benefits, and the Employer is unable or unwilling to provide additional funds, the Trustee will consider reducing CETVs as permitted under legislation.

If, at any other time, the Trustee is of the opinion that payment of CETVs at a previously agreed level could adversely affect the security of the remaining member's benefits, the Trustee will commission a report from the Scheme Actuary and will use the above criteria to decide whether, and to what extent, CETVs should be reduced.

Future actuarial valuations

The actuarial valuation under Part 3[2] is being carried out as at the effective date of 31 March 2019. All subsequent valuations will be due at three yearly intervals from this date. An actuarial report on the developments affecting the Section's funding level will be obtained as at each intermediate anniversary of that date.

The Trustee may call for a full actuarial valuation when, after considering the Scheme Actuary's advice, they are of the opinion that events have made it unsafe to continue to rely on the results of the previous valuation as the basis for future contributions. However, the Trustee will consult the Lead Employer before doing so.

Commissioning an additional valuation may not be necessary if agreement can be reached with the Lead Employer to revise the Schedule of Contributions in a way considered satisfactory by the Trustee and the Scheme Actuary.

[2] Part 3 of the Pensions Act 2004 covering Scheme funding.

This Statement of Funding Principles dated 27 August 2020 has been agreed by the Lead Employer and the Trustee of the Plan after obtaining advice from the Scheme Actuary.

Signed on behalf of the Lead Employer

Signature: DocuSigned by: SG Hayton 8404020F2264454...

Name: Steve Hayton

Position: Head of Group Pensions, Nuclear Decommissioning Authority

Date: 27 August 2020 | 09:19:06 BST

Signed on behalf of the Trustee of the Plan

Signature: DocuSigned by: Allan Whalley 71CB4450FE2A47B...

Name: Allan Whalley

Position: representing Strettea Independent Trustees Limited as Director

Date: 27 August 2020 | 08:24:37 BST

This statement has been agreed by the Trustee and Lead Employer after obtaining actuarial advice from me:

Signature: DocuSigned by: Mark McClintock 0AAD82EF9ECE491...

Name: Mark McClintock FIA
Position: Scheme Actuary
Date: 27 August 2020

Appendix to the Statement of Funding Principles

Sample rates

Leaving service

Rates per 1000 members at each age		
Age	**Withdrawal**	
	Male	**Female**
25	37	64
30	32	55
35	27	46
40	19	35
45	12	28
50	11	27
55	13	29

Ill health retirement

Ill health retirement decrements		
Age	**Male**	**Female**
20	0.0001	0.0002
30	0.0002	0.0003
40	0.0007	0.0011
45	0.0018	0.0022
50	0.0038	0.0045
55	0.0109	0.0136

Salary scales

Salary scale adjustment	
Age	**Scale**
Under 29	3.00%
30 to 34	2.50%
35 to 39	1.80%
40 to 44	1.40%
45 to 49	0.75%
Over 50	0.50%

Proportions married

	%
Age	**Male/Female**
20	75
30	75
40	75
50	82
60	79
70	81
80	77
90	54

H Schedule of Contributions

Schedule of Contributions

Sellafield Section of the Combined Nuclear Pension Plan

Schedule of Contributions for the purposes of Part 3 of the Pensions Act 2004 and Section 9 of the Occupational Pensions Schemes (Scheme Funding) Regulations 2005.

Status

This Schedule of Contributions for the Sellafield Section of the Combined Nuclear Pension Plan ("the Plan") has been prepared by the Trustee of the Plan, after obtaining the advice of Mark McClintock FIA, the Scheme Actuary. This Schedule of Contributions, put in place for the Plan, supersedes the previous schedule dated 30 May 2017.

The contribution rates and payment dates have been agreed between the Trustee and the Nuclear Decommissioning Authority (the "Lead Employer"). The Employer is Sellafield Limited. The Trustee and the Lead Employer have signed this schedule.

Contributions to be paid to the Plan for the period from 31 March 2019 to 31 March 2032

1) CPS Benefit Structure

Contributions in respect of future service

Member contributions: 5.0% p.a. of Pensionable Earnings

Employer contributions:

1 April 2019 to 31 March 2021: 25.2% p.a. of Pensionable Earnings

From 1 April 2021: 32.1% p.a. of Pensionable Earnings

The above contributions are to be paid to the Plan on a monthly basis. All contributions shall fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month.

Contributions in respect of the funding shortfall in accordance with the Recovery Plan dated 27 August 2020

Employer contributions:

The actuarial valuation of the Sellafield Section as at 31 March 2019 revealed a funding shortfall (technical provisions minus value of assets) of £122,121,000. To eliminate the funding shortfall, the Trustee and Lead Employer have agreed that the Employer will contribute the amount needed in accordance with the Recovery Plan dated 27 August 2020. This amounts to £19,920,000 per annum, payable monthly between 1 April 2021 and 31 March 2032, unless arrangements are made to meet the shortfall at an earlier date. No allowance for outperformance has been made on the asset returns.

2) New Joiners Benefit Structure

Employer contributions depend on the level of contributions each member elects to pay. As follows:

Member Contributions	Employer Contributions
3%	8%
4%	9.5%
5%	11%
6%	12.5%
7% or more	13.5%

Percentages relate to the members' Pensionable Pay. The above member contributions are to be deducted from earnings by the Employer and all contributions to be paid to the Plan on or before the 19th of each following month.

3) Shift Pay Pension Plan

Member contributions: Minimum of 5% p.a. of Pensionable Shift Pay

Employer contributions:

1 April 2019 to 31 March 2021: 25.2% p.a. of Pensionable Shift Pay

From 1 April 2021: 32.1% p.a. of Pensionable Shift Pay

The above contributions are to be paid to the Plan on a monthly basis. All contributions shall fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month.

Contributions in respect of Additional Voluntary Contributions

Any Additional Voluntary Contributions which members have chosen to make, whether invested on a defined contribution basis or used to purchase added years, are payable in addition to the above contribution rate and are to be paid on or before the 19th of the month after the month they have been deducted from members' earnings.

Contributions in respect of benefit augmentations

The Employer will pay any contributions required to meet any benefit augmentations granted or benefit improvements as agreed with the Scheme Actuary.

Contributions in respect of administration expenses and other costs

Any costs, charges and expenses incurred by the Sellafield Section of the Plan and levies payable to the Pension Protection Fund will be met directly by the Employer unless the Lead Employer dictates that they are met from the assets of the Sellafield Section or by the Lead Employer.

Pensionable Earnings

The definition of Pensionable Earnings is all gross sums received annually by a member in terms of (a) salary or wages, excluding overtime, bonuses and Shift Pay which is pensionable separately under Shift Pay Pension Plan rules; (b) responsibility allowances; (c) any other emoluments included within the definition of Pensionable Earnings for purposes of the CPS Benefit Structure, and (d) any other emoluments of a kind which the Lead Employer declares to be reckonable as Pensionable Earnings and which are notified in writing to the Members concerned.

Pensionable Pay

The definition of Pensionable Pay is all gross sums received annually by a member in terms of (a) salary or wages, excluding overtime but including Pensionable Shift Pay; (b) responsibility allowances; and (c) any other emoluments that the Lead Employer declares to be reckonable as Pensionable Pay and which are notified in writing to members concerned.

Pensionable Shift Pay

The definition of Pensionable Shift Pay is that part of Shift Pay as is determined by the Employer with the consent of the Lead Employer. In which, 'Shift Pay' is the extra pay received by a Member by way of shift supplement in respect of shift working.

This Schedule of Contributions dated 27 August 2020 has been agreed by the Lead Employer and the Trustee of the Plan:

Signed on behalf of Nuclear Decommissioning Authority

Signature: DocuSigned by:
8404020F2264454...

Name: Steve Hayton

Position: Head of Group Pensions, Nuclear Decommissioning Authority

Date: 27 August 2020 | 11:13:10 BST

Signed on behalf of the Trustee of the Plan

Signature: DocuSigned by:
71CB4450FE2A47B...

Name: Allan Whalley

Position: representing Strettea Independent Trustees Limited as Director

Date: 27 August 2020 | 02:48:23 PDT

This Schedule of Contributions, dated 27 August 2020 has been signed and agreed by the Trustee of the Plan after obtaining actuarial advice from me.

Signature: DocuSigned by:
0AAD82EF9ECE491...

Name: Mark McClintock FIA
Position: Scheme Actuary
Date: 27 August 2020

Actuary's certification of Schedule of Contributions

Name of Plan: Sellafield Section of the Combined Nuclear Pension Plan

Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this Schedule of Contributions are such that the statutory funding objective can be expected to be met by the end of the period specified in the Recovery Plan dated **27** August 2020 for the Plan.

Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the Statement of Funding Principles dated **27** August 2020.

The certification of the adequacy of the rates of contributions for the purpose of ensuring that the statutory funding objective can be expected to be met is not a certification of their adequacy for the purpose of securing the Plan's liabilities by the purchase of annuities, if the Sellafield Section of the Combined Nuclear Pension Plan were to be wound up.

Signature	DocuSigned by: 0AAD82EF9ECE491...	**Date**	27 August 2020 | 12:54:59 BST
Name	Mark McClintock	**Qualification**	Fellow of the Institute and Faculty of Actuaries
Address	Deloitte Total Reward and Benefits Limited Lincoln Building 27 - 45 Great Victoria Street Belfast BT2 7SL		

I Recovery Plan

Recovery Plan

Sellafield Section of the Combined Nuclear Pension Plan

This Recovery Plan has been prepared by the Trustee of the Combined Nuclear Pension Plan ("the Plan") for the purposes of Part 3 of the Pensions Act 2004, after receiving advice from Mark McClintock FIA, the Scheme Actuary.

This Recovery Plan has been agreed between the Trustee of the Plan and Nuclear Decommissioning Authority ("the Lead Employer").

Status

The most recent actuarial valuation of the Plan disclosed that, at the valuation date of 31 March 2019, the value of the Plan's assets was less than its Technical Provisions. The deficit was as follows:

Assets and Technical Provisions at 31 March 2019	£000s
Total technical provisions	1,507,416
Market value of assets	1,385,295
Deficit	(122,121)
Funding level	92%

The new employer future service contribution rate of 32.1% of Pensionable Earnings is payable from 1 April 2021. From 1 April 2019 to 31 March 2021, the Employer will contribute 25.2% of Pensionable Earnings and a shortfall has arisen from the contributions being less than the cost of accrual. The allowance for this shortfall has been included in the contributions of this Recovery Plan.

Statutory funding objective

The contributions agreed in the existing Schedule of Contributions will continue for two years from 1 April 2019 to 31 March 2021. The contributions will then change to the new rates for 11 years from 1 April 2021 to 31 March 2032.

The Trustee and the Lead Employer have agreed a recovery plan of annual contributions of £19,920,000 per annum, payable monthly, being paid to the Sellafield Section of the CNPP by the Employer for 11 years commencing from 1 April 2021 to 31 March 2032. No allowance for outperformance has been made on the asset returns.

Period in which the Statutory Funding Objective should be met

Based on the above contributions the funding shortfall is expected to be eliminated in 13 years from 1 April 2019.

Assumptions

The major financial assumptions used in the calculation of the required contributions are the same as those used to calculate the Plan's Technical Provisions as at 31 March 2019. These are outlined below.

Assumption at 31 March 2019	% per annum
Price inflation	
RPI	3.30%
CPI	2.30%
Discount rate	3.60%
Discount rate for future service	4.00%

This Recovery Plan dated 27 August 2020 has been agreed by the Lead Employer and the Trustee of the Plan:

Signed on behalf of Nuclear Decommissioning Authority

Signature: DocuSigned by: SG Hayton 8404020F2264454...

Name: Steve Hayton

Position: Head of Group Pensions, Nuclear Decommissioning Authority

Date: 27 August 2020 | 11:10:53 BST

Signed on behalf of the Trustee of the Plan

Signature: DocuSigned by: Allan Whalley 71CB4450FE2A47B...

Name: Allan Whalley

Position: representing Strettea Independent Trustees Limited as Director

Date: 27 August 2020 | 02:47:21 PDT

J s179 certificate

Scheme/Section details

Full name of scheme:	Combined Nuclear Pension Plan
Name of section, if applicable:	Sellafield Section
Pension Scheme Registration Number:	19009604
Address of Scheme (or section, where appropriate):	C/O Nuclear Decommissioning Authority Building 329 west Thomson Avenue Harwell Campus Oxfordshire
Postcode:	OX11 0GD

Effective date of this valuation	31 March 2019

Guidance and assumptions

S179 guidance used for this valuation	G8
S179 assumptions used for this valuation	A9

Assets

Total assets (this figure should not be reduced by the amount of any external liabilities and should include the insurance policies referred to below)	£1,385,295,132
Date of relevant accounts	31 March 2019
Percentage of the assets shown above held in the form of a contract of insurance where this is not included in the asset value recorded in the relevant scheme accounts.	0%

Liabilities	
Please show liabilities for:	
Active members (excluding expenses)	£1,601,054,746
Deferred members (excluding expenses)	£70,400,486
Pensioner members (excluding expenses)	£190,569,205
Estimated costs of winding up	£20,120,244
Estimated expenses of benefit installation/payment	£8,487,900
External liabilities	£0
Total protected liabilities	£1,890,632,581
Please provide the percentage of the liabilities shown above that are fully matched by insured annuity contracts for:	
Active members	0%
Deferred members	0%
Pensioner members	0%

Proportion of liabilities			
Please show the percentage of liabilities which relate to each period of service for:			
	Before 6 April 1997	**6 April 1997 to 5 April 2009**	**After 5 April 2009**
Active members	0%	4%	96%
Deferred members	0%	10%	90%
	Before 6 April 1997	**After 5 April 1997**	
Pensioner members	0%	100%	

Number and average ages of members

Please provide the number of members and average age (weighted by protected liabilities) as at the effective date of this valuation, for each member type, rounded to the nearest whole year.

	Number	Average age
Active members	6,113	48
Deferred members	651	46
Pensioner members	2,198	61

I certify that this valuation has been carried out in accordance with the Pension Protection Fund (Valuation) Regulations 2005 and with the appropriate section 179 guidance and assumptions issued by the Board of the Pension Protection Fund. I also certify that the calculated value of the protected liabilities is, in my opinion, unlikely to have been understated.

Signature	
Name	Mark McClintock
Date	30 September 2020
Name of employer	Deloitte Total Reward and Benefits Limited
Address	Lincoln Building, 2-45 Great Victoria Street, Belfast, BT2 7SL
Qualification	Fellow of the Institute and Faculty of Actuaries

K Glossary

Key terms used throughout this report are summarised below

Actuarial valuation	A review carried out by an actuary to assess whether a pension scheme's assets are sufficient to meet its liabilities
Deficit Reduction Contributions (DRCs)	The payments set out in the Recovery Plan to meet the funding shortfall
Discount rate	The rate used to place a present value on the projected benefit payments
Employer	Sellafield Limited
Exchange	The Pension Regulator's online scheme maintenance system.
Funding level	The ratio of the value of assets to the value of the liabilities
Funding valuation	An actuarial valuation of the Section carried under legislation to determine the contributions payable to the Section in future.
Guaranteed Minimum Pension ("GMP")	A minimum level of income provided to members of contracted-out pension schemes between 1978 and 1997.
Pension Protection Fund ("PPF")	An arrangement launched in April 2005 that provides compensation to members of private sector defined benefit pension schemes when their sponsoring employer becomes insolvent. The level of PPF compensation would not normally be at the full level of the benefits that would otherwise have been due from the scheme.
Long Term Funding Target (LTFT)	A secondary, more prudent funding objective than the SFO. The target could be a low dependency position, or to target settlement of the liabilities with an insurance company
The Pensions Regulator	The regulatory body for work-based pension schemes in the UK, which reviews the funding of private sector defined benefit pension schemes

Recovery Plan	An agreement between the Trustee and the Employer for payments needed to meet any shortfall between the assets and Technical Provisions
s179 valuation	A valuation that is used to determine a scheme's annual PPF levy. The valuation uses assumptions prescribed by the PPF, which are broadly consistent with the way insurers price pension schemes for buy-out purposes. The valuation is based on the level of PPF compensation that members would receive if the scheme entered the PPF on the valuation date, rather than Section's benefits.
Schedule of Contributions	A schedule setting out the contribution rates and payment dates agreed between the Trustee and the Employer and certified by the Scheme Actuary as being adequate to satisfy the SFO.
Solvency position	The ratio of the assets to the estimated cost of securing the Section's benefits in full with an insurance company
Statutory Funding Objective ("SFO")	The requirement that a defined benefit pension scheme should have sufficient and appropriate assets to cover its Technical Provisions
Statement of Funding Principles	The documented policy for meeting the SFO and the principles for determining the assumptions to calculate the Technical Provisions
Technical Provisions	The actuarial value of the accrued liabilities of the Section used to determine future contributions
Trustee	The Trustee of the Section
Transfer value	The amount a scheme will pay on behalf of a deferred member who wishes to transfer their benefits to another pension arrangement
Valuation Date	31 March 2019

Deloitte.

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