



Actuarial Valuation Report as at 31 March 2022

GPS Nexia Solutions Section of the Combined
Nuclear Pension Plan

August 2023

Executive summary

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Fellow of the Institute
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**Isio Total Reward and
Benefits Limited**

August 2023

This report sets out the results of the actuarial valuation of the GPS Nexia Solutions section ("the Section") of the Combined Nuclear Pension Plan ("the Plan") as at 31 March 2022.

Results summary			
31 March 2022 (£000's)	Technical Provisions	Solvency (estimated)	PPF (Section 179)
Assets	6,309	6,309	6,309
Liabilities	5,265	8,110	4,611
Surplus/(deficit)	1,044	(1,801)	1,698
Funding level	120%	78%	137%

The key risks for the Trustee of the Plan to monitor are:

- **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 National Nuclear Laboratory Limited ("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.
- **Investment risk:** The investment strategy has an exposure to higher risk growth 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.
- **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.
- **Longevity risk:** There is a risk that members live longer than anticipated, and therefore the cost of providing the benefits is higher than expected.
- **Member selection risk:** There is a risk that member experience is not as expected e.g., members do not commute pension at retirement for an additional cash lump sum. The risk that a significant number of members may take a more valuable option than that assumed in the Technical Provisions.
- **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.

Actions being taken to mitigate these risks are:

- Regular reviews of the employer covenant.
- Triennial actuarial valuations and regular review of life expectancy in light of the most recently published CMI tables and a full mortality analysis was completed as part of the 31 March 2022 actuarial valuation.
- 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.
- Regular reviews of investment performance and strategy including the level of growth assets and the level of hedging against movements in market conditions.
- Provision of annual funding updates from the Scheme Actuary plus any ad hoc funding updates as required.
- 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.

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Introduction

The aims of the valuation are:

- To calculate the Technical Provisions of the Section and to show the extent to which the Section's existing assets are sufficient to cover them as at the valuation date (the Statutory Funding Objective);
- To review the experience of the Section since the last actuarial valuation;
- To assess the solvency position of the Section;
- To calculate the value of the liabilities of the Section in relation to the Pension Protection Fund;
- To calculate the contribution rate that should be paid in respect of further accrual of benefits; and
- To provide information in order to determine a Recovery Plan, if applicable, for the funding of any disclosed deficit of the Section's Technical Provisions against its assets.

Valuation background

The financial and demographic assumptions used for the Technical Provisions have been agreed by the Trustee and the Employer following actuarial advice from me. These assumptions are detailed in the Statement of Funding Principles. The Trustee should be familiar with the Code of Practice 03 – "Funding Defined Benefits" and other relevant material published by the Pensions Regulator.

Disclosures

I am the Scheme Actuary to the Plan appointed in accordance with the requirements of Section 47 of the Pensions Act 1995.

This report, providing details of my actuarial valuation of the Section as at 31 March 2022, has been commissioned by and is addressed to the Trustee. Whilst other parties may be provided with the report, it should not be relied upon by any other person. Any person other than the Trustee who chooses to rely on this report does so at their own risk. To the fullest extent permitted by law, I, and Isio Total Reward and Benefits Limited accept no responsibility or liability to that party in connection with this report.

There is a statutory requirement under Part 3 of the Pensions Act 2004 for valuations to be carried out no less frequently than every three years.

The Trustee should make this report available to the Employer within seven days of receipt.

Compliance with actuarial standards

This paper builds on:

- the Statement of Funding Principles and Schedule of Contributions each dated 18 May 2023.
- My advice on the:
 - Demographic assumptions in my paper for the Trustee meeting held on;
 - 6 April 2022
 - 13 July 2022; and
 - 12 October 2022
 - Pensionable Earnings assumption in my paper for the Trustee meeting held on 12 October 2022
 - Financial assumptions in my papers for the Trustee meetings held on;
 - 12 October 2022
 - 8 December 2022; and
 - 15 February 2023
- The results papers provided for the Trustee meetings held on:
 - 8 December 2022
 - 15 February 2023; and
 - 26 April 2023

These papers, along with this report, constitute the actuarial work that I have provided on the actuarial valuation. The Technical Actuarial Standards TAS 100 and TAS 300 published by the Financial Reporting Council apply to the work on this actuarial valuation and I confirm that the work complies with these standards.

Employer covenant

Following the independent review of the covenant of the Employer in reports prepared by Cardano Advisory dated March and June 2022, the Trustee have formed views on the strength of the Employer.

The covenant advisor's conclusion was that the strength of the Employer's covenant was "Strong", which was the same assumed strength as at the 31 March 2019 actuarial valuation.

The Trustee should keep the covenant of the Employer under review.

Valuation Process

Membership data

The quality of the valuation data determines the accuracy of the results and, as such, it is important that the information provided is of a suitable quality. I have relied upon the accuracy of the information provided by the administrators of the Section on behalf of the Trustee for this valuation.

Checks have been performed to assess the appropriateness of the data used, including reference to the audited accounts for the Plan year ending with the valuation date. I have no reason to doubt the accuracy of the data provided although I cannot confirm that the detailed information in respect of every member is correct in all respects. Consequently, I do not accept any liability in respect of my advice where I have relied on data which is incomplete or inaccurate.

The membership data, which has been supplied by the administrator, EQ, as administrators of the Section, is summarised in the Appendices, together with the data from the previous valuation.

Plan benefits

The benefits used in the valuation are those described in the Plan's Trust Deed and Rules.

On 26 October 2018, the High Court made a ruling in a case involving the Lloyds Banking Group that UK pension schemes will need to equalise benefits in respect of any member who accrued a Guaranteed Minimum Pension (GMP) after 17 May 1990. The judgment from the case confirms that members' benefits need to be equalised for the effects of unequal GMP benefits accrued after 17 May 1990 and provided some clarity regarding the methodologies which may be used.

To implement the judgment, it will be necessary to undertake a calculation (dependent on the method) of the benefits that a member of the opposite sex would receive, based on the same service and Pensionable Earnings history. If that figure is higher, then the member would require an uplift to their benefits.

It is expected to take some time to undertake these detailed calculations to quantify the additional liability arising accurately. Therefore, I have made an approximate allowance for the impact of GMP equalisation in the Section's Technical Provisions, s179 (PPF) and solvency liabilities.

More detailed calculations in respect of equalising GMP benefits are expected to be carried out during the period to the next valuation as at 31 March 2025 and therefore I expect a more accurate allowance for the impact will be included as part of that valuation.

There is no current practice of awarding additional benefits on a discretionary basis, and accordingly this valuation makes no allowance for any such discretionary benefits in addition to benefits provided by the rules of the Plan.

Defined Contribution benefits

The Section has assets and liabilities in respect of Additional Voluntary Contributions have been excluded throughout this valuation.

Asset valuation

The value of the Section's assets has been taken from the audited accounts of the Plan for the year ending 31 March 2022. This is a market value and is compatible with the value of the liabilities calculated at the same date. The value of the assets used for this valuation is £6,309,000.

The current holdings are summarised in Appendix 1.

Whilst the longer term expected return from return generating assets exceed the assumed rates of return on which the Technical Provisions are based, their relative returns can be volatile in the shorter term and may consequently lead to short term volatility of the funding position of the Plan. Subject to the potential short-term volatility, the investment policy is not inappropriate given the form and incidence of the Plan's liabilities.

Valuing the Technical Provisions

The Technical Provisions are the value of the Plan's future cash outflows. These cash flows comprise the pension and lump sum payments expected to fall due from the Plan in respect of benefits already accrued to existing members.

Since these cash flows are in respect of pension payments to be made over many years into the future, they are long term and uncertain in nature. They are determined by the timing and level of benefits payable from the Plan, but their exact values will depend on, amongst other factors, future rates of inflation and Pensionable Earnings increases, how long members will live, and when members choose to take their benefits.

Assumptions

The Trustee has taken advice from the Scheme Actuary with regard to the assumptions to be used to calculate the Technical Provisions.

The Trustee has also considered the employer covenant as well as the investment strategy of the Plan. In doing so, the Trustee has considered the ability of the employer to be able to support the Plan in the event of unfavourable future experience, and the risks associated with the investment strategy.

The assumptions are set out in the Appendices.

Funding method

As specified in the Trustee's Statement of Funding Principles (which is included in the Appendices), the funding method used to calculate the Plan's position relative to the funding target is the Projected Unit Method, using a 3-year control period. The choice of funding method is restricted by legislation. The previous valuation also used the Projected Unit Method and a 3-year control period.

The Projected Unit Method of funding has also been used to determine the value of liabilities and the contributions required in relation to future pensionable service. As the Section is closed to new entrants, the expected cost of each year's future accrual is likely to change as the active membership ages. In this valuation, I have taken account of such increased costs for the next 3 years.

Future contribution rates will depend on the future experience of the Plan. Deficits or surpluses can be expected to emerge at future valuations if future experience is different from the assumptions underlying this valuation. Depending on the magnitude of any such future deficit, it may be necessary to adjust the Employer's contribution rates or change the Plan's benefits for future accrual.

Assumptions

I have used the assumptions set out in the Statement of Funding Principles to calculate the Plan's Technical Provisions. A copy of the Statement of Funding Principles is given in the Appendices. I consider the assumptions used to be appropriate for calculating the Technical Provisions.

Financial assumptions

The main financial assumptions adopted for this valuation and the previous valuation are shown in the table below:

Key Assumptions (% p.a.) – Technical Provisions		
Year	31 March 2019	31 March 2022
Discount Rates		
Pre-retirement	3.80%	4.65%
Post-retirement	2.10%	2.90%
Inflation, Pensionable Earnings, and pension increases:		
RPI	3.50% p.a.	3.80% p.a.
CPI	2.50% p.a.	3.20% p.a.
Pensionable Earnings increases	Years 0-10: RPI + 0.25%	Year 1: 5%
	Over 10 years: RPI + 0.5%	Years 2-7: RPI
		Over 7 years: RPI +0.5%
	Plus promotional Pensionable Earnings scale	Plus promotional Pensionable Earnings scale
Deferred revaluation and pension increases	3.50%	3.80%

Results

The results of the valuation of the Technical Provisions are set out in the table below. These results reflect the status of the Plan on an ongoing basis.

Results (£000's):	Technical Provisions
Past Service:	
Active liabilities	2,519
Deferred liabilities	384
Pensioner liabilities	2,362
Expenses	0
Total liabilities	5,265
Assets	6,309
Surplus/(Deficit)	1,044
Funding level	120%
Future Service (% of Pensionable Earnings)	
Total cost of accrual	47.7%
Less member contributions	5.0%
Employer cost	42.7%

My certification of the calculation of the Technical Provisions is given in the Appendices. It should be noted that the Technical Provisions of the Plan are not the same as the cost of securing benefits should the Plan be wound up. This information is given in the "Estimate of Solvency" section of this report.

Future estimate of Technical Provisions

I am required to state how the Technical Provisions funding position given above is projected to change by the next valuation. I estimate that the funding level of the Plan will remain the same over the three years from 31 March 2022. At the time of the next statutory actuarial valuation, I estimate that the assets will be sufficient to cover approximately 120% of the liabilities as valued on the current Technical Provisions basis.

In making these statements, I have assumed that market conditions remain stable, liability experience is in line with that expected (i.e., follows the assumptions underlying the Technical Provisions), contributions are paid in line with the Schedule of Contributions and performance of the assets is in line with the assumptions underlying the Statement of Funding Principles and with asset outperformance of 0.25% p.a. above the discount rate. No allowance has been made for known experience since the valuation date. In practice it is likely that the actual funding level will vary materially in the period to the next valuation. In particular, the potential short-term volatility of the Plan's assets can lead to significant variation in the funding level.

Accruals Test

Auto-enrolment requirements

Employers have a legal duty to automatically enrol their eligible employees into an automatic enrolment scheme. Occupational pension schemes qualifying under the employer duty legislation have to meet certain standards set out in the Pensions Act 2008. This includes meeting the relevant quality requirement.

There are two alternative tests that a defined benefit scheme can undertake in order to satisfy the qualifying criteria. The first is based on the cost of future benefit accrual for active members (the "Accruals test") and the other, more complex, test is based on a comparison of test scheme benefits and the Plan benefits (the "Test Scheme Standard test").

If the relevant quality requirement was not met, then the active members would need to be auto-enrolled into another scheme which meets the quality requirements.

Accruals test

In line with the requirements of the test I have undertaken the accruals test separately for the following benefit scales:

Members with an accrual rate of 1/80th for each year of service and a lump sum of 3/80ths for each year of service.

I confirm that I am satisfied that the Plan meets the relevant quality requirement under the "cost of accrual" test, and so no further action in respect of this is required until my next check in three years' time.

As such I have not considered the Plan under the Test Scheme Standard test.

Sensitivities

Sensitivity analysis

It is likely, especially in the short term, that the assumptions will not be borne out in practice. Therefore, it is important to consider the potential impact of actual experience being different from that assumed.

It should be noted that the relative difference between assumptions is more important than the absolute value of each. In particular, the valuation results are sensitive to differences between:

- discount rate and rate of revaluation of accrued benefits;
- discount rate and rate of Pensionable Earnings increases; and
- discount rate and rates of increases to pensions in payment.

The assumption for life expectancy is another key assumption for valuing the liabilities. The mortality tables used allow for recent pension scheme experience and improvements.

In the following table, I have shown the sensitivity of the Technical Provisions results to changes in the valuation assumptions. These show the impact on solely the liabilities. All figures are in comparison with the Technical Provisions results previously shown.

It should be noted that a change in bond and gilt yields will affect both the calculation of the Technical Provisions and the market value of the portion of the Plan's assets invested in bonds and gilts.

Assumption changed	Change in funding position (£000's)	Funding Level
Pre-retirement discount rate decreases by 0.5%	121	923
Post retirement discount rate decreases by 0.5%	438	606
Discount rate decreases by 0.5%	569	475
RPI rate increases by 0.5%	530	514
Mortality – 10% decrease in the scaling factor	155	889
Mortality – increase in the long-term rate by 0.25%	56	988
Commutation (reduction from 56% of members commuting the maximum amount of pension to 46%)	18	1,026

Note:

Change in RPI inflation assumption includes the effect on CPI, Pensionable Earnings increases and pension increases assumptions.

Review of past experience

Previous valuation

I carried out the last actuarial valuation of the Plan as at 31 March 2019 and the results were published in a report dated 26 October 2020. That valuation showed a funding level of 92% of the Section's Technical Provisions, and a deficit of £428,000.

The Trustee and the Employer agreed a contribution rate of 37.0% of Pensionable Earnings from 1 April 2019 to 30 June 2020 and 49.5% of Pensionable Earnings per annum from 1 July 2020 to cover the cost of new benefits, plus a contribution of £100,000 payable on 1 July 2020, 1 April 2021 and 1 April 2022 and £200,000 payable on 1 April 2023. Expenses and PPF levies would be payable directly by the Employer.

Contributions paid

Since the last valuation, contributions have been paid by the Employer at the previously agreed amounts set out in the Schedules of Contributions certified on 12 May 2020 and the previous one certified on 30 May 2017, except that the Trustee agreed that the Employer did not need to pay the final contribution of £200,000 on 1 April 2023 due to the surplus at 31 March 2022 actuarial valuation and the imminent signing of the updated Schedule of Contributions.

Developments since the previous valuation

Changes in benefits since the last valuation

There have been no fundamental changes to the benefits since the previous actuarial valuation.

RPI Reform

The potential reform of the RPI measure of inflation has been an ongoing topic. On 25 November 2020 the Chancellor confirmed that there would be no change before February 2030. At that point the UK Statistics Authority is able to change the methodology and the current expectation is that the methodology will be aligned with that underlying the CPI measure, with an allowance for housing costs, CPIH. Whilst not changing the benefits, there is an impact on the methodology for setting inflation assumptions after 2030.

Guaranteed Minimum Pension ('GMP') equalisation

As discussed in an earlier section, the Trustee will undertake a detailed member by member exercise to adjust benefits due to GMP equalisation. For the purpose of this valuation, I have estimated the additional liabilities which may arise as a consequence of GMP equalisation to be a negligible proportion of the Section's liabilities.

New legislation

Since the last valuation, there have been no major changes to the Pensions Act 2004 funding regime. The Department of Work & Pensions ('DWP') launched a consultation on the Funding and Investment Regulations ending in Autumn 2022. We expect the Pensions Regulator ('TPR') to consult on its draft Funding Code.

From the consultation papers, at a point of reaching significant maturity, schemes will be expected to have a journey plan to reach full funding on a low-risk basis (set out in a written 'statement of strategy'). Assets should also be invested to follow a gradual de-risking approach towards a low risk and broadly cashflow matched strategy. In addition, the draft Regulations set out that appropriate recovery plans should recover funding deficits 'as the employer can reasonably afford'. This is a strengthening of The Pension Regulator's existing guidance.

Although not a requirement at this valuation, the Trustee should consider these matters at the next valuation.

Experience analysis

I have compared the results of the current valuation with the position at the previous valuation to analyse how the position has changed over the intervening period. The key sources of surplus and deficit over the period are detailed below.

	31 March 2022 (£'000s)
Surplus / (deficit) at 31 March 2019	(428)
Interest on the surplus / (deficit)	(25)
Investment returns above / (below) expected	527
Cost of accrual vs. future service contributions	(25)
Deficit contributions	300
Changes in market conditions	(222)
Changes to Statement of Funding Principles	762
Inflationary increases	168
Experience	(13)
Surplus / (deficit) at 31 March 2022	1,044

Investment returns

I estimate that, from the published figures in the Plan's annual reports, over the three years since the last valuation the Plan's assets have achieved a rate of return of 5.7% p.a.

Estimate of solvency

At the valuation date, the estimated funding level of the Section on a solvency basis was 77%.

The Occupational Pension Schemes (Scheme Funding) Regulations require me to give my estimate of the solvency position of the Section as at the valuation date.

Assumptions for estimate of solvency

A solvency basis is not the same as the Technical Provisions basis. The Technical Provisions basis takes into account the investment strategy of the Plan and the Trustee's view of the Employer covenant. A solvency basis estimates the assumptions an insurance company may use to price the cost of providing the benefits on a fully guaranteed basis, in return for a one-off premium. This will take into account:

- The returns on the assets an insurer would typically hold to back these liabilities.
- The margins added by the insurer to take account of the risk, as the insurer takes on sole responsibility for all future benefit payments. There is no recourse for further premiums if experience is worse than expected.

My estimate of the solvency position of the Plan has been made as my estimate of the buy-out cost in line with the Isio team's estimate of pricing in the buy-out market as at the valuation date.

The buy-out team keeps track of the buy-out market and the pricing bases used by the insurance companies and from the information supplied are able to provide estimated buy-out pricing assumptions.

It is important to note that the solvency estimate is only a guide. In particular, the buy-out market is volatile, both relative to interest rates and in the supply and demand for this type of business, and consequently no single estimate can be relied upon. Ultimately, the true solvency position can only be established by completing a buy-out.

Estimated solvency position

The results are as follows:

Results (£000's)	31 March 2019	31 March 2022
Total liabilities	8,026	8,110
Assets	5,207	6,309
Surplus/(Deficit)	(2,819)	(1,801)
Funding level	65%	78%

If the Section is wound up, the Section would have insufficient assets to secure the 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.

Future solvency estimate

I estimate that the solvency position of the Plan will improve over three years from 31 March 2022 to a funding level of 84%.

In making this statement, I have assumed that market conditions remain stable and liability experience is in line with that expected (i.e., follows the assumptions underlying the solvency estimate). I have also assumed that the performance of the assets is in line with the assumptions underlying the Statement of Funding principles and with asset outperformance of 0.25% p.a. above the discount rate.

No allowance has been made for known experience since the valuation date.

In practice it is likely that the funding level and coverage of the different priority classes will vary materially in the period to the next valuation. In particular, the potential short-term volatility of the Plan's funding position can lead to significant variation in the level of benefit coverage.

Pension Protection Fund

Background

The Pension Protection Fund (the "PPF") is a compensation scheme that aims to provide members of private sector defined benefit schemes with a specified minimum level of compensation for pension benefits when the sponsoring employer becomes insolvent. It is run by a statutory body. The compensation benefits are not guaranteed and the PPF is funded by levies payable by defined benefit schemes.

Currently, the PPF will pay a maximum of 100% of benefits for those over normal retirement age and 90% of the benefits of those under normal retirement age. Pensions in payment from the PPF only receive increases in line with Consumer Prices Index inflation (capped at 2.5% per annum) in respect of service after 5 April 1997, and no increases in payment are given for pensions in respect of service before 6 April 1997. Spouses' pensions are limited to 50% of the member's pension.

If the Employer becomes insolvent, the Plan may become eligible to enter the PPF. One of the main requirements is that the Plan's assets are less than the buyout of the benefits provided by the PPF.

Section 179 valuation

It is a requirement that a valuation for the purpose of determining the annual levy payable to the PPF (a Section 179 valuation) is carried out, at least every three years.

I have carried out such a valuation as at the valuation date, and the results have been input on the Pensions Regulator's Scheme Exchange system. A summary of the Section 179 valuation results is given below.

Results (£000's):	Section 179
Active liabilities	2,057
Deferred liabilities	460
Pensioner liabilities	1,913
Expenses	181
Total liabilities	4,611
Assets	6,309
Surplus/(Deficit)	1,698
Funding level	137%

Contributions

Standard contributions

The standard contributions are determined as being equivalent to the present value of future service liabilities (i.e., the value of the benefits expected to be accrued in respect of future pensionable service after the valuation date) over a pre-set period and are expressed as a percentage of Pensionable Earnings.

The standard contribution rate for future benefits has been assessed on the same assumptions as those used to calculate the Technical Provisions, along with future Pensionable Earnings increase assumption, to be 47.7% of Pensionable Earnings. After allowing for members' contributions, the standard Employer contribution rate is 42.7% p.a. of Pensionable Earnings for active members, calculated over a 3-year term. This is lower than the Employer's rate of 49.5% from the last valuation due to the change in assumptions. The new future service contribution rate started on 1 April 2023.

Expenses

The Plan's administrative expenses, including all levies, for example the PPF levy, will be met directly by the Employer. The death-in-service lump sum benefit for this Section is self-insured. This includes investment management invoices raised directly by fund managers but excludes those met by a deduction from the Plan's assets at source.

Schedule of Contributions

All contributions, including their effective dates, must be set out in a Schedule of Contributions, to be signed on behalf of the Trustee and the Employer and certified by me. A copy of the schedule and my certificate is included in the Appendices.

The Trustee will revisit the position at the next actuarial valuation or before in the event of any material change in circumstances.

Appendices

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Appendix F

Appendix G

Appendix H

Appendix I

Appendix J

Appendix K

Appendix L

Appendix M

Appendix N

Appendix O

Appendix P

Appendix Q

Appendix R

Appendix 1

Membership summary and assets

Membership data at the valuation date is summarised below, along with membership data at the previous valuation date for comparison.

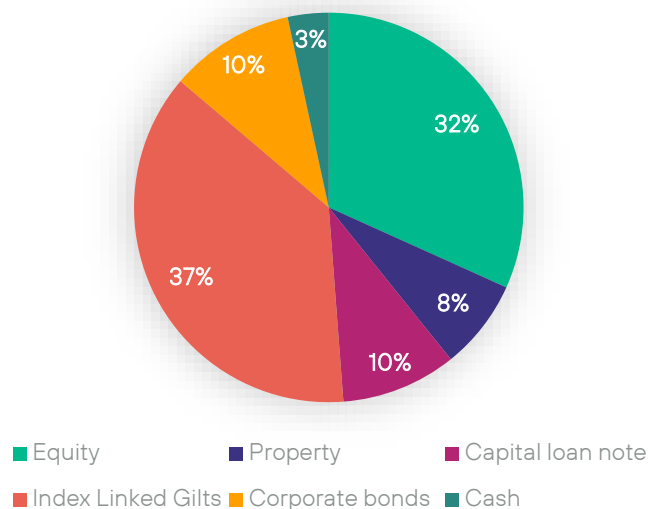
	Number (previous valuation in brackets)	Weighted average age* (previous valuation in brackets)	Total Pensionable Earnings/pension (£'000s)**
Actives	2 (3)	51.1 (51.7)	163 (217)
Deferreds	1 (1)	49.1 (46.1)	8 (8)
Pensioners	2 (1)	65.7 (65.9)	80 (49)

*Weighted by liability

** Accrued pension at date of leaving for deferreds, current pension in payment for pensioners and dependants

Plan Assets

The chart below shows the market value of the assets as at 31 March 2022. This figure has been taken as the audited value of the assets and excludes the value of members' AVCs Funds. The total is £6,309,000.



Appendix 2

Benefit summary

This report has been based upon benefits 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.

Appendix 3

Certificates and documentation

Certification of the calculation of the Technical Provisions

Statement of Funding Principles

Schedule of Contributions

Section 179 valuation

Certification of the calculation of the Technical Provisions

Name of Scheme: GPS Nexia Solutions section of the Combined Nuclear Pension Plan

Calculation of Technical Provisions

I certify that, in my opinion, the calculation of the Plan's Technical Provisions as at 31 March 2022 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 Plan and set out in the Statement of Funding Principles dated 18 May 2023.

Signature

Date

18 May 2023

Name

Qualification

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Isio Total Reward and Benefits
Limited

Statement of Funding Principles

Statement of Funding Principles

As part of the actuarial valuation of the GPS Nexia Solutions Section ("the Section") of the Combined Nuclear Pension Plan ("the Plan") as at 31 March 2022, the Trustee has reviewed their Statement of Funding Principles. The statement has been updated to reflect:

- The Trustee's assessment of the Employer covenant;
- changes in financial market conditions; and
- recent demographic publications since the last actuarial valuation as at 31 March 2019.

This statement, dated _____, has been agreed by the Trustee of the Plan and the Employer as required by section 223 of the Pensions Act 2004.

The actuarial valuation of the Plan as at 31 March 2022 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 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 Employer to obtain agreement to this statement and any changes to it.

The assumptions selected will provide an appropriate 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 increase at a slower rate than assumed;
- inflation rates are higher than expected; and
- members live longer than anticipated.

Additional funding objectives

The Plan has no funding objectives other than the Statutory Funding Objective described above.

Method and assumptions used to calculate the Technical Provisions

The Section's Technical Provisions will be calculated using the actuarial method known as the Projected Unit Method.

The principal assumptions used to calculate the Technical Provisions will be determined using the methodologies outlined below. The financial assumptions have been derived from market rates at the valuation date (31 March 2022).

Financial Assumptions	Technical Provisions	
	Derivation	Assumption at 31 March 2022
Pre-retirement discount rate	Based on the yield available on fixed interest gilts with a similar duration to the Section's liabilities plus an allowance for the higher return that would be expected from growth assets after an allowance for prudence. A reduction has been allowed for to reflect the strength of the covenant. The higher return on the growth assets will reflect the appropriate margin above the fixed interest gilts at the effective date of the calculation.	4.65% p.a.
Post-retirement discount rate	Based on the yield available on fixed interest gilts with a similar duration to the Section's liabilities with an allowance for the higher return that would be expected from the assets held to back the pensioner liabilities.	2.90% p.a.
Retail Prices Index (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.	3.80% p.a. (being 0.2% p.a. below the Bank of England data at a 20 year duration, the deduction being to allow for inflation risk premium)
Consumer Prices Index (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.	3.20% p.a. (being 0.60% p.a. below the RPI inflation assumption)

Financial Assumptions	Technical Provisions	
	Derivation	Assumption at 31 March 2022
Increases to Pensionable Earnings	<p>Pensionable Earnings will be assumed to increase relative to the assumed rate of RPI inflation, by an amount based on an experience analysis conducted for the 31 March 2022 valuation.</p> <p>Updated promotional earnings scale based on experience analysis conducted for the 31 March 2022 Valuation</p>	<p>Year 1: 5% Years 2-7: RPI Over 7 years: RPI plus 0.25%</p> <p>Plus promotional earnings scale (see Appendix: Table A)</p>
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.	<p>3.80% p.a.</p> <p>(no reduction from assumed inflation rate)</p>

Demographic Assumptions	Technical Provisions	
	Derivation	Assumption
Mortality	Standard published tables of mortality would be adopted that have been found appropriate for the Plan. These tables would be adjusted to allow for expected future improvements in longevity.	110% of SAPS S3 Pensioner tables CMI 2021 projections with a 1.5% p.a. long term rate of improvement (smoothing parameter of 7 and W ₂₀₂₀ & W ₂₀₂₁ both zero)
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 Employer.	See sample rates in Appendix: Table B
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 Employer.	See sample rates in Appendix: Table C
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 the future, taking account of the Plan's experience.	Age 60 or 65 as applicable to specific members
Age difference	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 Employer.	Husband assumed to be 3 years older than wife

Demographic Assumptions	Technical Provisions	
	Derivation	Assumption
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 See sample rates in Appendix: Table D
New entrants	The Section of the Plan is closed to defined benefit new entrants.	No allowance
Commutation	The assumption is based on recent experience.	56% of members assumed to commute the maximum amount of pension
GMP Equalisation	Allowance has been made for GMP equalisation.	Calculated on a member-by-member basis
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	Death in service lump sums allowed for in the future service 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

Meeting the funding shortfall

The Trustee and the Employer have agreed that any funding shortfall 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 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 Trustee's assessment of the financial covenant of the Employer;
- the business plan of the Employer;
- 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

No allowance has been included in the assumptions to pay discretionary benefits or increasing benefits that are not guaranteed under the Plan rules. The Employer may direct the Trustee to increase benefits for individual members or all members.

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.

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 reducing 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 3¹ is being carried out as at the effective date of 31 March 2022. 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 Employer before doing so.

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

¹ Part 3 of the Pensions Act 2004 covering scheme funding.

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

Signed on behalf of the Employer of the Plan

Signature _____

Name _____

Position _____

Date _____

Signed on behalf of the Trustee of the Plan

Signature _____

Name _____

Position _____

Date _____

Appendix to the Statement of Funding Principles - Sample rates

A. Promotional earnings scales

Scale adjustment	
Age	Increase (p.a.)
Under 29	3.00%
30 to 34	2.50%
35 to 39	1.80%
40 to 41	1.40%
42 to 49	1.00%
Over 50	0.75%

B. 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

C. Ill health retirement

Ill health retirement decrements		
Age	Male	Female
20	0.0000	0.0000
25	0.0001	0.0000
30	0.0001	0.0001
35	0.0003	0.0001
40	0.0005	0.0004
45	0.0011	0.0008
50	0.0023	0.0016
55	0.0045	0.0035

D. Proportions married

Age	% Male and Female
20	75
30	75
40	75
50	82
60	79
70	81
80	77
90	74

Schedule of Contributions

Schedule of Contributions

This Schedule of Contributions for the GPS Nexia Solutions 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 12 May 2020.

The contribution rates and payment dates have been agreed between the Trustee and National Nuclear Services Limited ("the Employer"). The Trustee and the Employer have signed this schedule.

Contributions to be paid to the Plan for the period from 1 April 2022 to 31 March 2027

Contributions in respect of future service

1) GPS Benefit Structure

Contributions in respect of future service

Member Contributions:	5.0% p.a. of Pensionable Earnings
------------------------------	-----------------------------------

Employer Contributions:

1 April 2022 to 31 March 2023:	49.5% p.a. of Pensionable Earnings
--------------------------------	------------------------------------

From 1 April 2023:	42.7% 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.

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 5.0% p.a. of Pensionable Shift Pay*

Employer Contributions:

1 April 2022 to 31 March 2023: 49.5% p.a. of Pensionable Shift Pay

From 1 April 2023: 42.7% 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 GPS Nexia Solutions Section of the Plan and levies payable to the Pension Protection Fund will be met directly by the Employer.

Pensionable Earnings

The definition of Pensionable Earnings is the gross annual rate of basic pay excluding Pensionable Shift Pay but including (i) pensionable allowances; (ii) responsibility allowances; and (iii) any other emoluments included within the definition of Pensionable Earnings for purposes of the GPS Benefit Structure.

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 Employer with the consent of the Lead Company 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 (a) in respect of a GPS DB Members, that part of Shift Pay as determined by the Employers from time to time and notified to the members concerned; (b) in respect of a GPS New Joiner, half of a Member's Shift Pay. In which, 'Shift Pay' is the extra pay received by a Member by way of shift supplement in respect of shift working, or in respect of GPS New Joiners, pay designated as such by the Employer with the consent of the Section Lead Employer.

**This Schedule of Contributions dated _____ has been agreed
by the Employer and the Trustee of the Plan**

Signed on behalf of the Employer of the Plan

Signature _____

Name _____

Position _____

Date _____

Signed on behalf of the Trustee of the Plan

Signature _____

Name _____

Position _____

Date _____

Actuary's certification of Schedule of Contributions

Name of Plan: GPS Nexia Solutions Section of the Combined Nuclear Pension Plan

Adequacy of rates of contributions

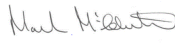
1. I certify that, in my opinion, the rates of contributions shown in this Schedule of Contributions are such that the statutory funding objective can be expected to be met on 31 March 2022 and continue to be met for the period for which the schedule is to be in force.

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 _____.

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 GPS Nexia Solutions Section of the Combined Nuclear Pension Plan were to be wound up.

Signature

DocuSigned by:

D8E3510C0A3641D...

Date

Name

Mark McClintock

Qualification

Fellow of the Institute
and Faculty of
Actuaries

Address

Deloitte Total Reward and
Benefits Limited
1 New Street Square
London
EC4A 3HQ

S179 valuation

Valuation details (all monetary amounts to be in pounds, not thousands or millions)	
	£
Total assets	6,309,000
Date of relevant accounts	31 March 2022
Total protected liabilities	4,610,958
Liabilities for active members, excluding expenses	2,056,672
Liabilities for all deferred pensioners, excluding expenses	460,340
Liabilities for pensioners, excluding expenses	1,912,611
Estimated costs of winding up (excluding the estimated expenses of benefit installation/payment)	177,185
Estimated expenses of benefit installation/payment	4,150
External Liabilities	-
Insurance	
Non-accounts insurance assets	-
Insurance matched active liabilities	-
Insurance matched deferred liabilities	-
Insurance matched pensioner liabilities	-
Proportion of active liabilities excluding expenses figure entered which relates to service:	
Pre 6 April 1997	19%
6 April 1997 – 5 April 2009 (inclusive)	42%
Post 5 April 2009	39%
Proportion of deferred pensioner liabilities excluding expenses figure entered which relates to service:	
Pre 6 April 1997	0%
6 April 1997 – 5 April 2009 (inclusive)	87%
Post 5 April 2009	13%
Proportion of pensioner liabilities excluding expenses figure entered which relates to service:	
Pre 6 April 1997	29%
Post 5 April 1997	71%

Membership and average ages		
	Number of members	Average age
Active members	2	51
Deferred members	1	49
Pensioner members	2	66

	31 March 2022
Version number of section 179 guidance used for this valuation	G9
Version number of section 179 assumptions used for this valuation	A10

Appendix 4

Glossary of terms

Term	Explanation
Best-estimate	A value placed on a liability with the expectation that this value is in the middle of the possible range of such values.
Contingent asset	An asset which could be made available to a scheme under certain circumstances e.g., if a company defaults on a contribution payment. These can be used as security if a deficit is not to be repaid immediately.
Defined Benefit (DB)	A scheme where the rules determine the benefits a member will receive, typically related to number of years' service and pensionable pay.
Defined Contribution (DC)	A scheme where the value of a member's individual pension pot at retirement and market conditions at retirement determine the amount of pension a member receives.
Discount rate	The assumed interest rate used to find the present value of payments to be paid or received in the future.
Company covenant	The ability and willingness of the company to make contributions to a scheme as required to pay for benefits.
Guaranteed Minimum Pension (GMP)	The minimum amount that a member of an occupational scheme contracted-out of the second State pension will receive in respect of their service prior to 6 April 1997.
Inflation	Retail Price Index (RPI) and Consumer Price Index (CPI) are referred to separately in this report since, typically, both inflation measures are relevant to benefit calculations.
Pension Protection Fund (PPF)	A compensation scheme that provides members of qualifying private sector defined benefit schemes with a specified minimum level of compensation when a sponsoring employer becomes insolvent.
Prudence	The margin above a best-estimate value made in an assumption, or placed on a liability, so as to allow a better than equal chance of the assumed outcome being achieved.
Recovery Plan	Specifies how any deficit will be eliminated and the time period over which this will happen.
Schedule of Contributions (SoC)	Specifies the contributions to be paid by the company and members.
Statement of Funding Principles (SFP)	Specifies how the SFO will be met including the assumptions for calculating the Technical Provisions and how the Recovery Plan is formulated.
Statutory Funding Objective (SFO)	Defined in section 222 of the Pensions Act 2004. Every scheme must have sufficient and appropriate assets to cover their Technical Provisions, or a Recovery Plan in place to reach this objective.
Technical Provisions	Assets required to make provision for the accrued benefits when they fall due.
The Pensions Regulator (TPR)	Regulatory body for work-based pension schemes in the UK.
Transfer Value	Amount a scheme may pay a member when they have left service for the member to put in an alternative pension arrangement of their choosing.

