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# NNB GENERATION COMPANY (HPC) LTD

## CONTRACT BASELINE DOCUMENT

### HPC ENGINEERING CONSTRUCTION SECTOR AGREEMENT (ECSA) 2023

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## APPROVAL: HPC ENGINEERING CONSTRUCTION SECTOR AGREEMENT 2023

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# 1 INTRODUCTION

1. This agreement (the Engineering Construction Sector Agreement - ECSA) is made between:  
NNB Generation Company (HPC) Limited (the Client);  
the Tier 1 Contractors<sup>1</sup>; and  
Unite and the GMB (the Unions).
2. The Unions are the only Unions recognised on the Hinkley Point C construction site by the Client and the Tier 1 Contractors in respect of engineering construction work.
3. This agreement will come into effect on the mobilisation date of the main civil engineering contractor.
4. This agreement will apply to every tier of contractor engaged on the project and their workforces: each Tier 1 Contractor is responsible for ensuring that their sub-contractors meet this requirement.
5. This agreement, although not legally enforceable in itself, has been entered into freely by the parties, who are all fully committed to its contents and aims. The parties intend it to be binding in honour and they undertake to ensure that their respective members and officials honour all its provisions. Further, the Client will ensure that appropriate language is included in its construction agreements with each of the Tier 1 Contractors to give full effect to its provisions.
6. This agreement is intended to give effect to the Client's wish for its nuclear new build construction programme to be based on a "best in class" employment framework and a genuine approach of respect for people at all levels<sup>2</sup>.
7. The parties accept that this agreement has been made to cover the entire HPC construction period and that there will be no further economic claims during this period.

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<sup>1</sup> The Tier 1 contractors include: MEH Alliance (Balfour Beatty, NG Bailey, Altrad Doosan, Cavendish Nuclear, Altrad), GE, Bilfinger, Framatome, Rolls Royce.

<sup>2</sup> The parties' working definition of "best in class" in negotiating the HPC collective agreements was that, at the time of their conclusion, they provided a package of terms and conditions of employment that was overall more favourable than those available under the engineering construction national working rule agreement.

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## 2 PREAMBLE

8. The Client's nuclear new build programme is the most significant UK infrastructure investment in decades. To meet the challenge of delivering this programme, our project collective agreements are designed to remove excuses for failure and to provide a framework of employment provision which promotes a positive team approach by all people involved within an interesting and fulfilling working environment. They also provide for social partnership and close working relationships between the parties.
9. Enshrined within our project collective agreements is the concept of a Social Covenant to provide the basic ethos of our project and a "benchmark" for working relationships and project industrial relations.
10. In practical terms, this agreement requires contractors to establish integrated teams, each with a specified skills mix, set up to meet the project pathway and deliver the project's planned scope, schedule and cost requirements to the required safety and quality standards. It requires new working practices that reflect technological change, offsite manufacture and developments in on-site construction. Integrated teams of engineering construction workers will include the skills and individual disciplines necessary for the efficient completion of the work. Such integrated teams will be led by supervisors whose responsibility is to provide the team with all necessary drawings, materials and clear work-faces, as required to meet the project pathway programme. Integrated teams will be structured to optimise opportunities to bring new people into the workforce (including traditional and adult apprentices) and to enable them to progress and develop their skills through the project skills development programme. The ratio of apprentices (both traditional and adult) to craft workers and above should be no more than 1:8 (or 1:10 for traditional apprentices).
11. This approach to integrated teams and skills development is designed to maximise the benefits of the project to the current national UK workforce and to potential new entrants to the UK workforce, notably in the region of Hinkley Point. By providing exciting new opportunities, it will help in tackling social disadvantage (e.g. unemployment among the regional population) as well as in replenishing the UK construction workforce, with its demographic challenges, as new investment arises.

## 3 SOCIAL COVENANT

12. The Social Covenant is reproduced here to underline its importance in our project.
13. Our ambitions are: to deliver the safest, most competitive, productive and sustainable project in the UK; to provide among the most desirable places to work and; to deliver major socio-economic benefits to the local and wider UK communities. Given the scale, duration and legacy of our proposed Nuclear New Build Programme, it provides a great opportunity to achieve a step-change in the capability of the UK engineering and construction sectors. It is our collective desire for the HPC project to be the launch pad and an exemplar for future nuclear new build projects in the UK.

14. We see a close social partnership between the Client, contractors and the Unions as a fundamental pre-requisite for the success of Hinkley Point C and have developed this balanced “Social Covenant” to help ensure that everyone involved understands their contribution to the project and what they can expect in return.
15. Our guiding principles, as outlined in the Social Covenant, are as follows.
  - a. The highest obtainable health, safety and welfare performance at the site, including the provision of an occupational healthcare scheme.
  - b. Respect for individuals of all identities and cultures.
  - c. A strong nuclear safety culture.
  - d. Safely meeting or beating the project schedule.
  - e. Effectively engaging with the workforce.
  - f. Maximising employment opportunities for people from the regional and UK population.
  - g. A project legacy of skills and capability, both locally and nationally.
  - h. Innovative and effective skills training and grade structures to maximise career progression opportunities.
  - i. ‘Best in Class’ employment terms and conditions.
  - j. ‘Best in Class’ welfare and site facilities.
  - k. An environmentally sensitive way of working.
  - l. Quality, efficient and productive performance which delivers ‘Right First Time, Every Time’.
  - m. Direct employment.<sup>3</sup>
  - n. Clear, fair and consistent site rules of conduct, and grievance and disciplinary procedures.
  - o. Structured social partnership to support a constructive working environment and high levels of Union membership.
  - p. Long term employment and job security.
  - q. Continuous improvement and flexibility in response to project requirements.

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<sup>3</sup> “Direct employment” means employed by the appropriate employer under a contract of employment, with the associated income tax and class 1 NI status.

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### 4 TERMS AND CONDITIONS OF EMPLOYMENT

16. The scope of workers covered by this agreement is the engineering construction workforce delivering permanent structures associated with the nuclear new build project at Hinkley Point C (i.e. all structural steel erection, mechanical, electrical, instrumentation, insulation, craneage and scaffolding work involved in engineering construction contractors' work scope on site). Any clarification required regarding the scope of Hinkley Point C sector agreements will be provided by the Joint Project Board (JPB).<sup>4</sup>
17. All workers within the scope of this Agreement will be directly employed by a Tier 1 Contractor or sub-contractor under a contract of employment.<sup>5</sup> The contract of employment will incorporate the terms and conditions set out in this Agreement. Any new labour supply sub-contractors must be approved by the Site Joint Council before mobilising any employees on site. No payroll companies, or any other organisations with an equivalent purpose, are to be used at HPC.
18. Employment on the site is conditional on the individual: holding and carrying at all times their individual Project Passport which will include their ACE card (or equivalent acceptable evidence of competence), CCNSG card and security records; successfully passing through the appropriate stages of the project's on-boarding and induction processes under the Employment Affairs Unit; and signing (and being provided with a copy of) a written statement of employment particulars to confirm their acceptance of the terms of their contract of employment, including the requirement to comply with site procedures<sup>6</sup>.
19. The Client and its contractors are committed to a fair and transparent recruitment policy. All parties to this agreement will actively ensure that the engagement of labour is based on the individual's ability to meet the needs of the project and to undertake the work for which they are being recruited. Contractors are expected to be thorough and rigorous in making selection decisions (e.g. by holding competence-based interviews). Contractors should provide unsuccessful candidates with the reasons for their non-selection. All parties agree that it is unlawful and unacceptable for any party to use or make any reference to any form of blacklist.
20. Prior to working on site, all workers will be required to complete the security clearance and site induction processes and to have satisfied any other requirements set out in Clause 18. Attendance at site induction will be paid at the normal hourly rate. At the completion of induction, workers will receive the full standard project PPE equipment from their employer and will receive further PPE equipment as is required.

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<sup>4</sup> Refer to Clarification Document No 2, which can be found in the Common Framework Agreement

<sup>5</sup> For guidance on the application of the agreements to Non-UK contractors refer to Clarification Document No. 11, which can be found in the Common Framework Agreement

<sup>6</sup> All reasonable costs (including appropriate pay and travel & accommodation expenses) associated with the acquisition of a CCNSG card as part of the "on boarding" process or the renewal of a CCNSG card for an existing worker on site, will be met by the appropriate employer. This principle applies to any skills card or the maintenance of any qualification (Continuing Professional Development) deemed necessary by the Client or the Tier 1 Contractor. Refer to Clarification Document No.5 which can be found in the Common Framework Agreement,



21. The contractors' managers and supervisors must meet the minimum requirements of the site supervisory standard before being set to work on site.
22. It is the intention of all parties that workers will be: managed in a fair and socially-just manner; treated with the dignity and respect; and provided with the highest possible level of reward. In return, workers will be expected to positively contribute to the project's success by: respecting managers, supervisors and project facilities; working in accordance with the project ethos of high standards of safety (zero-harm), quality and productivity; and upholding their obligation to support the project's skills development programme under Clause 25.

## 5 JOB STRUCTURE

23. To facilitate highly productive working, full use of the following job structure will be made within integrated teams. The requirement for workers to be suitably qualified and experienced ("SQEP") to undertake their roles within the job structure will be based on national standards wherever such standards have been established. The size and skill/ grade make-up of each team will vary according to the requirements of the team's work in meeting the project pathway plan. Grading decisions will be based on the level of competence, duties and responsibilities required by the role.<sup>7</sup>

Skilled Working Charge-hand  
Advanced Craft  
Craft  
Hinkley Support Operative  
Engineering Construction Adult Apprentice  
Apprentice

24. Workers will be adaptable in responding to project priorities within their range of competence, as required by the contractor.
25. Maintaining and developing the engineering construction skills base is a major objective under the Social Covenant and this agreement. All workers will engage positively with the project training and skills development programme. This means that, as reasonably required by the contractor, workers will: actively support the entry of new workers into the industry (particularly apprentices, both traditional and adult, along with engineering construction operatives); and assist in the skills and qualification acquisition of their colleagues. The full grading structure will be utilised appropriately to support realisation of the Social Covenant's aims.

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<sup>7</sup> Guidance on benchmark roles defining the scope of construction engineering trades under the ECSA is set out in the Reward section of the HPC Silver Book, including guidance for employers on grading decisions. Refer to Clarification Document No. 2 which can be found in the Common Framework Agreement.

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## 6 REWARD<sup>8</sup>

### Base and Overtime Pay<sup>9</sup>

26. Hourly rates of base and overtime pay from 2 January 2023 will be as follows and thereafter will be subject to the pay review mechanism specified in Clauses 42 and 43 below.

Grade	Base pay per hour (£)	Overtime Rate A (x 1.4) per hour (£)	Overtime Rate B (x 1.8) per hour (£)	Bonus Potential (10%) (£)
Skilled Working Charge-hand (6)	25.41	35.58	45.74	2.55
Advanced Craft (5)	24.38	34.14	43.89	2.44
Craft (4)	23.51	32.92	42.32	2.36
Hinkley Support Operative (HSO)/ Adult Apprentice (ECAA) (1-3)	18.97 17.42 14.50	26.56 24.39 20.30	34.15 31.36 26.10	1.90 1.75 1.45
Traditional Apprentice Year 4	16.91	23.68	30.44	1.70
Traditional Apprentice Year 3	14.08	19.72	25.35	1.41
Traditional Apprentice Year 2	10.98	15.38	19.77	0.00
Traditional Apprentice Year 1	8.47	11.86	15.25	0.00

<sup>8</sup> Compliance with the pay and benefits prescribed under this Agreement will be assured by the EAU. This will include audits. Payments made or benefits provided outside the provisions of the Agreement will be regarded as non-compliant. Payments made in accordance with the no-detriment arrangements under Clause 59 will be deemed to comply.

<sup>9</sup> Base pay rates (other than those for apprentices) are subject to a minimum of the Living Wage, set by the Living Wage Foundation. The Living Wage for 2023 is £10.90 per hour outside London.

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**7 OVERTIME**

27. The contractor may require overtime to be worked as part of a planned work pattern, or otherwise subject to reasonableness (e.g. at least 24 hours' notice). The worker may not unreasonably refuse to work overtime. Overtime rates will be payable for hours worked above the basic working week (as specified in Clause 47) as follows:
- Monday to Friday above normal working hours for the day at rate A
  - Saturdays above normal working hours for the first 4 hours at rate A and thereafter at rate B
  - Sundays above normal working hours – rate B

**8 SHIFT PREMIUM**

28. The contractor may require workers to undertake shift working. Shift payments will be made, where appropriate, based on the following benchmarks. The premium for any proposed shift pattern will be set by the contractor on the basis of these benchmarks and in consultation with the relevant workforce teams (and, if requested, their Union representatives).

Shift Pattern	Shift Premium (% of base pay)
Night shifts (4-5 day working between 20:00 and 08:00)	22.5%
Double day shifts (Monday to Friday) Morning (after 6am)	13.5%
Double day shifts (Monday to Friday) Afternoon (after 12pm)	20%
Rolling shifts on days	17.5%
Rolling shifts on nights	28%

**9 HINKLEY POINT C MILESTONE BONUS SCHEME**

29. A milestone bonus scheme will be applied, based on safe and quality delivery to plan of specified project milestones selected, by the Tier 1 contractor and agreed with the Client, from the construction programme.<sup>10</sup> Where project milestones are achieved on this basis, a milestone bonus payment of 10% of base pay for all hours worked will be payable to each worker. This scheme will be applied on an area basis to all workforce teams. Decisions about milestone bonus payments will be agreed between the Tier 1 contractor and the Site Construction Director.

<sup>10</sup> A typical milestone bonus scheme may consist of weighted elements, for example; schedule 6%, safety LTI/RIDDOR 2% and quality RFQ 2%

30. Milestone bonus payments will be paid weekly or fortnightly (depending on payroll intervals) and one month in arrears, based on the milestones achieved. Eligibility for milestone bonus payments will be 2 months after the worker has begun work on the project. Accrued milestone bonus payments will be payable up to and including an individual's last day of employment under the ECSA. (This means that during their first year of employment under the ECSA, an individual will be eligible for 11 months of milestone bonus payments).
31. Milestone bonus payments where milestones are achieved are set out in Section 6 Reward table.

## **10 MILESTONE BONUS SCHEME CONDITIONS**

32. All workers are required to fully commit to the most effective possible productive performance in exchange for the milestone scheme.
33. The arrangements and requirements of the scheme will be open, transparent and readily understandable by all workers.
34. All queries or issues arising from the application of the scheme must be raised in the first instance with the appropriate supervisor and, wherever practicable, resolved informally. The supervisor will normally respond to such approaches within 3 working days. If the issue is not satisfactorily resolved through this informal process, it may be referred by the worker into the project grievance procedure or, where appropriate, into the collective differences procedure.
35. If any unofficial industrial action is taken, then the employer has the right to withhold all milestone payments in respect of the entire week during which such action has taken place. Any decision to withhold milestone payments under this clause will only be taken following prior discussion with the appropriate Union FTO.

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### 11 WELDING SKILLS PAYMENTS

36. Welding skills payments are set out in Appendix 1. These payments will be reviewed on an annual basis using the RPI formula in Clauses 42 and 43.

### 12 PENSIONS

37. Each worker will participate in a pension programme as a requirement under their contract of employment for the duration of their assignment on the Hinkley Point C project<sup>11</sup>. They will be enrolled into the defined contribution scheme chosen by their employer and approved by the EAU. The JPB will receive regular reports on pension programmes at HPC, including outcomes from the EAU assurance process.
38. The minimum contributions under this pension arrangement will be 5% of base pay from the employer and 5% of base pay from the worker, in both cases in respect of the 38-hour basic working week (or pro-rata for those working less than 38 hours in the week).
39. Additional voluntary contributions above the minimum contributions specified above may be made by the worker without matching employer contributions, subject to HMRC regulations.
40. Subject to HMRC regulations, the Tier 1 Contractor will operate a salary sacrifice scheme in respect of employee pension contributions enabling the worker to save on National Insurance contributions.
41. This agreement is not intended to worsen a worker's employer-provided pension arrangement. If an individual believes that they have a more favourable pension arrangement, they may (subject to employer consent) elect to continue with this arrangement while engaged on the Hinkley Point C construction project, instead of taking up the pensions offering in this agreement.

### 13 PAY REVIEW MECHANISM

42. Base pay will be reviewed annually and increased by RPI. Revised rates will take effect from the first Monday of January.
43. The RPI figures used to calculate these increases will be the average of the monthly-published annualised percentage increases for the 12-month period up to and including the October immediately preceding the review date.

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<sup>11</sup> Contributions should be made into the pension scheme for all employees, regardless of age from the commencement of employment on the HPC Project.

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### 14 BENEFITS AND ALLOWANCES

- 44. Contractors will apply welfare benefits on the basis of Appendix 2.
- 45. Accommodation and travel allowances will be payable on the basis of Appendix 3. Qualification for accommodation allowance will not be affected by the fact that workers will be recruited through the Employment Affairs Unit and employment brokerage.
- 46. Periodic travelling expenses will apply on the basis of Appendix 4.

### 15 WORKING HOURS AND PRODUCTIVITY

- 47. The basic working week is 38 hours.
- 48. Work patterns, including the distribution of basic working hours over time, will be determined in accordance with clause 43 of the Common Framework Agreement (CFA). An example of a possible distribution of basic working hours is: Monday to Thursday 0800 – 16:30; and Friday 0800 – 14:30. (The working hours in this example include the 30-minute unpaid daily rest break under Clause 51).
- 49. It is a condition of employment that workers work the specified site hours and their integrated team's work pattern (determined in accordance with CFA clause 43). All employees will change into working clothes prior to clocking on at the start of the working period and will clock off at the end of the working period before changing at the end of the working period.
- 50. All parties are committed to maximising the productive working time of the project hours available, including bell-to-bell working.

### 16 REST BREAKS

- 51. The project will meet the highest practicable standards of catering on site and will operate best practice in relation to the organisation and management of rest breaks. Rest breaks will be planned to ensure productive performance in line with the ethos of the project. Rest breaks will be taken at the appropriate welfare facilities around the workface as are designated for each integrated team. The total time taken by each worker for rest breaks during a working day will normally be 10 minutes paid plus a minimum of 30 minutes unpaid. Where the working day exceeds 10 hours, the total time taken for rest breaks will be 20 minutes paid plus a minimum of 30 minutes unpaid. Within this framework, the timing of rest breaks will be specified by the contractor – and may be varied - in consultation with workface teams and, where appropriate, their Union representatives, to provide for the most efficient taking of the breaks linked to the productivity and flexibility requirements of the project. For example, for a day exceeding 10 hours, workers may have one paid break of 20 minutes and one unpaid break of 30 minutes. Rest breaks will not be specified at the start or the end of the work period.

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52. The specified timescales for rest breaks will be strictly adhered to and complied with.

### 17 HOLIDAYS

53. The holiday entitlement is 25 normal working days (190 hours) plus public holidays<sup>12</sup>.
54. All holiday pay referred to in Clause 53 will be calculated and paid on the basis of average base pay, shift pay, overtime premiums, milestone bonus payments and taxable travel allowances over a reference period of the previous 52 weeks. Legitimate time off, including sickness absence, will be neutral in such calculations.
55. The Client may fix up to 10 days' holiday for HPC workers around public holidays (e.g. Christmas and New Year). Any work undertaken on public holidays will be paid at Overtime Rate B and, in addition, the individual concerned will be entitled to an additional day's holiday in lieu. The timing of non-fixed holidays is subject to agreement between the individual and the relevant contractor and should be established as far in advance as possible.

### 18 SPECIAL LEAVE

56. Bereavement, paternity leave and maternity leave will apply on the basis of Appendix 5.

### 19 MARKS OF RESPECT

57. Contractors should be sensitive and supportive where workers wish to mark the death of a fellow worker. Guidelines applying in such circumstances are set out in Appendix 6. However, unauthorised stoppages of work in such circumstances are a breach of this agreement and of the contract of employment. Such actions would justify disciplinary action and the withholding of pay, bonuses and benefits (including widows' and widowers' benefits).

### 20 SAFETY AND QUALITY CULTURE AWARENESS

58. All parties are committed to an on-going programme of safety and quality culture awareness and will ensure that appropriate training is given to all workers during the course of the project in support of this commitment. Payment during training will be at basic rate plus the same hourly bonus as earned by the relevant integrated team at the workplace.

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<sup>12</sup> For variations to standard 5 day working patterns refer to Clarification Document No. 6, which can be found in the Common Framework Agreement

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### 21 NO DETRIMENT

59. Workers with contracts of employment which are overall more favourable than the terms of this agreement may elect to retain the terms of these contracts of employment instead of taking up the terms of this agreement while engaged on HPC, subject to prior agreement of the EAU and Site Joint Council of these overall more favourable contract terms. In these circumstances, the workers in question will remain part of the collective bargaining unit covered by this agreement and in all other respects, the CFA and the ECSA will apply to them<sup>13</sup>.

### 22 SKILLS DEVELOPMENT

60. All parties fully recognise the need for a resurgent and much-improved UK construction process and all agree to work jointly and harmoniously to effectively develop and deploy the skills development programme that is essential to the success of the project.
61. It is a condition and contractual requirement for all workers on the project, as part of their team, to assist and participate whenever and wherever reasonably required in the project training and individual skill development programme. This programme will be innovative and it will reinforce the project productive performance ethos. Apart from offsite training activity, the programme will be delivered through daily workplace activity. Individuals will require skills development and training support to assist them in realising their potential and developing their careers. Delivery of the skills development programme will be monitored by the JPB, through the EAU, with the full engagement of the appropriate accredited Union representatives, including accredited Union learning representatives.
62. The Client has a clear aspiration and responsibility to bring significant socio-economic benefit to both the regional and general UK population and to this end will agree with the Primary Contractors and the Unions meaningful and significant numbers of both traditional and adult apprentices for employment within the project workforce.
63. The Unions will, via their training, educational and skills departments, be offered the fullest possible involvement in developing and delivering the skills development programme.
64. Such a programme is designed to provide much-needed opportunity for UK local and regional people to join the project workforce, a new productive and successful approach to major UK construction projects and a lasting legacy of employment.
65. All parties are required to co-operate with and participate positively in the project training and skills development programmes; for example, by working together on the training of

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<sup>13</sup> This clause does not in any way diminish the parties' joint commitment to providing employment and skills opportunities within the local region and the wider UK, in accordance with the Client's planning consent obligations. It does not imply any intention to recruit non-UK labour on terms and conditions that are inferior to those set out in this agreement.



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apprentices and adults who wish to enter the construction industry. The Unions will uphold the requirement for experienced craft workers to take responsibility for apprentices<sup>14</sup> assigned to them (e.g. to act as mentors) as part of our obligation to meet the future resource needs of the industry. We are committed to training at least 500 traditional and adult apprentices under this agreement over the period of the project.<sup>15</sup> All parties will co-operate with local training establishments (e.g. at Bridgwater College and the Cannington Construction Skills Centre) to ensure that training courses meet national industry standards (e.g. ECITB) and are tailored to the needs of the Project.

- 66. Traditional and adult apprentices are expected to progress through the grading structure during their training programme to meet the skills requirements of the integrated teams working on site. Skills development plans will define points during their training (e.g. successful completion of training modules) when they are ready to be considered for upgrading. All parties are committed to supporting workers to realise their potential and to progress their careers on the basis of the skills and resource requirements of the project. The skills development programme is outlined in Appendix 7.
- 67. All parties are committed to giving people in the local community every opportunity to work on the Hinkley Point C project in all capacities and disciplines. The grading structure and the skills development programme will be fully utilised to enable them to enter the workforce and then develop their skills according to their potential.

**23 KEY POINTS FROM THE COMMON FRAMEWORK AGREEMENT**

- 68. A redundancy payments scheme will operate as follows, subject to minimum redundancy payments equal to those derived from the statutory redundancy payments scheme.<sup>16</sup>

Weeks' continuous service (statutory definition)	Weeks' pay (statutory definition)
Up to 26	1
Between 27 and 52 inclusive	2
Between 53 and 104 inclusive	4
105 and over	6

<sup>14</sup> "Apprentice" (traditional or adult) means an employee of a contractor working under a nationally-recognised apprenticeship scheme.  
<sup>15</sup> To meet the parties' commitments and aspirations for skills development in the HPC project, the overall grading profile of the engineering construction workforce in scope of the ECSA must maximise opportunities to bring in new entrants and apprentices, develop their skills and replenish the UK engineering construction skills base. The parties' performance indicators to assess contractors' success in delivering these commitments and aspirations are, over the course of engineering construction work on the project, to achieve a ratio of craft grades and above to below-craft grades of no more than 60%:40%, as envisaged in the research work undertaken in support of the HPC planning consent. This requirement complements the apprentice ratios set out in Clause 10.

<sup>16</sup> Refer to Redundancy Ready Reckoner in Appendix 9

**NOT PROTECTIVELY MARKED**

69. If a contractor contemplates redundancies, they will notify the EAU and the Unions and commence consultation in line with statutory requirements. Establishing arrangements for collective consultation does not negate the obligation (legal and moral) on the contractor to undertake consultation with the individuals potentially affected. The first priority will be to maintain employment of the potentially affected individuals; for example, by using the re-brokering facility within the site employment brokerage. If redundancies are unavoidable, redundancy handling and selection will give priority to: supporting the individuals concerned; and to maintaining a balanced and productive workforce composed of employees whom management has assessed to have the skills and experience most needed to deliver the project productive pathway programme. Additional provisions regarding redundancy selection are set out in Appendix 8.
70. The project welfare facilities will be located as efficiently as possible in relation to the respective project work faces, to provide for the most efficient access and egress to and from the workforce
71. The grievance and disputes procedures must be readily understood by the workforce, readily accessible to them and must be speedy and robust in dealing with and resolving issues of concern.
72. The need for successful completion of this key project is recognised and understood by the Unions and to this end it is agreed that no industrial action whatsoever will be countenanced until all stages of the collective differences procedure have been exhausted. The Common Framework Agreement provides for a JPB final stage for any differences referred to it.
73. The Employment Affairs Unit (EAU) led by the Client will provide a “project compliance” structure to ensure that:
- collective agreements are properly applied by all Primary Contractors and subcontractors;
  - effective and harmonious working arrangements are established and maintained; and
  - disputes are avoided.

The Unions will have a close working relationship with the EAU. The EAU, acting on behalf of the JPB, will also oversee the operation of the grievance, disciplinary and performance support procedures, in full consultation with the contractors and Unions.

74. A project communications protocol will be developed to ensure well-managed workforce communications from the project joint bodies.
75. The Unions at national level will join with the designated Client and Primary Contractor senior management representatives at the Joint Project Board - the Top Table Forum – as required under the JPB constitution. This body will provide oversight of the application of collective agreements on site and of the site industrial relations governance structure.
76. Each recognised Union will designate an FTO for the project and will provide the appropriate EAU representative with their name, credentials and contact details. Union FTOs wanting to

visit the site will contact the appropriate EAU representative in advance to make appropriate arrangements.

77. The Unions will be granted all appropriate facilities required to represent and communicate with their members on the project. The Client and Primary Contractors will supply to the Unions appropriate facilities so as to allow them to carry out their project-wide functions and responsibilities, as specified in the Facilities Agreement (CFA Appendix 6).
78. Union membership will be encouraged and all appropriate facilities as required in accordance with the ACAS Code of Practice will be provided by all contractors / suppliers. This will include a Union input to the induction process and the provision of check-off arrangements for members upon completion of the appropriate documentation. The Client intends, in close consultation with all contractors and the Unions that every reasonable and practicable measure will be taken to ensure the highest possible level of Union membership.
79. Shop stewards and safety representatives will be accredited to the individual contractor/supplier by the appropriate Union official designated with responsibility for the project and all appropriate facilities and co-operation will be provided to these representatives in accordance with the ACAS Code of Practice. Only those accredited shop stewards and safety representatives will be recognised and afforded facilities.
80. The site industrial relations machinery provides a structure of communications and consultation between the Client, all contractor/suppliers and union representatives.

**NOT PROTECTIVELY MARKED**

**APPENDIX 1. WELDING SKILLS TESTS AND PAYMENTS**

1. Where a prospective employee is required to undertake a welding skills test as part of the selection process, they will be reimbursed for reasonable travel expenses, subject to them providing appropriate evidence of expenditure (e.g. receipts). If subsequently recruited to work on the project, they will also be paid for the time taken for the test (i.e. 8 hours at basic rate).
2. Craft or advanced craft workers who qualify for pressure welding by skills test, at the request of their employer, will be paid a welding skills payment, according to their skill level, as shown in the attached table.

<b>CATEGORY A</b>	
Materials to be welded	Any material in category B, C or D
Nature of Work	Manual, semi-automatic or stud welding of non-pressure parts e.g. casings or structural work
Qualifying weld tests to be completed by each skilled employee and approved to:	The satisfaction of the employer within the appropriate design and safety standards, but where the work does not require a test to be passed in accordance with the ISO 9606 / ASME IX or equivalent
Proficiency payments in addition to the skilled craft rate	None - N/A
<b>CATEGORY B</b>	
Materials to be welded	Carbon Steel
Nature of Work	Welding of pressure parts, tubes, pipes, vessels or structural work
Qualifying weld tests to be completed by each skilled employee and approved to:	ISO 9606 / ASME IX or equivalent
Proficiency payments in addition to the skilled craft rate	19p per hour
<b>CATEGORY C</b>	
Materials to be welded	Either ferritic alloy or austenitic steel (but not both)
Nature of Work	Welding of pressure parts, tubes, pipes or vessels

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Qualifying weld tests to be completed by each skilled employee and approved to:	ISO 9606 / ASME IX or equivalent for both materials
Proficiency payments in addition to the skilled craft rate	30p per hour
<b>CATEGORY D</b>	
Materials to be welded	Both ferritic alloy and austenitic steel
Nature of Work	Welding of pressure parts, tubes, pipes or vessels
Qualifying weld tests to be completed by each skilled employee and approved to:	ISO 9606 / ASME IX or equivalent for both materials
Proficiency payments in addition to the skilled craft rate	46p per hour
<b>CATEGORY E</b>	
Materials to be welded	Any material in category B, C or D
Nature of Work	Welding of pressure parts, tubes, pipes or vessels
Qualifying weld tests to be completed by each skilled employee and approved to:	A0339 Build quality 1 and 2 weldments or equivalent for any material
Proficiency payments in addition to the skilled craft rate	58p per hour

**NOT PROTECTIVELY MARKED**

**APPENDIX 2. WELFARE BENEFITS**

1. Employers are required to provide welfare benefits to the standard set out in the table below.

<b>Sick Pay Cover</b> (excluding first 7 days and payable for a maximum of 26 weeks in total) <sup>17</sup>		<b>Benefit</b>
Grades 1-6	Week 2-14	£157.02
Grades 1-3 <sup>18</sup>	Week 15-27	£157.02
Grades 4-6	Week 15-27	£267.06
<b>Death Benefit</b>		
Death in Service Benefit		£35,000 - # # - Cover extends to <u>6 months</u> after termination of employment – provided person is not working
Conditional Death Benefit		£50,000 - #
Accidental Death Benefit		£40,000
<b>Personal Accident / Permanent &amp; total Disability Benefit</b>		
Loss of sight – one eye		£50,000
Loss of sight – two eyes		£100,000
<b>Loss by amputation or permanent loss of use of:</b>		
One limb		£50,000
Two or more limbs		£100,000
Big toe		£1,000
Any other toe		£500
Four fingers or a thumb		£2,000
Index fingers		£1,250
Any other finger		£750
<b>Permanent disablement</b> from resuming any occupation for remuneration or reward		£100,000

2. Sick pay cover will be reviewed annually and increased by CPI. Revised rates will take effect

<sup>17</sup> Where a new period of incapacity lasting for eight or more consecutive days commences within eight weeks of a previous period of absence from work this shall be deemed to be a continuation of the previous period for the purposes of calculating waiting days before benefit becomes payable and also for the maximum period for which benefit will be paid

<sup>18</sup> Apprentices receive the same rate as those at Grade 1–3 for Week 15-27

from the first Monday of January. The CPI figures used to calculate these increases will be the average of the monthly-published annualised percentage increases for the 12-month period up to and including the October immediately preceding the review date.

**NOT PROTECTIVELY MARKED**

## **APPENDIX 3. ACCOMMODATION AND TRAVEL ALLOWANCES<sup>19</sup>**

### Taxation of allowances

1. The allowances set out in this appendix follow provisions of the engineering construction national working rule agreement and apply to workers who work on site. The HMRC recognises the HPC Engineering Construction Agreements as supplementary to the engineering construction national working rule agreements. This is in the context of the HPC Agreements' policy of direct employment, with income tax and Class 1 National Insurance contributions deducted at source. The HPC Agreements do not permit the tax avoidance schemes that are otherwise prevalent in the UK construction industry, including bogus self-employment and the use of umbrella companies. Workers will be expected to provide and sign off information on forms provided by their employer and, where appropriate, to provide receipts. The purpose is to ensure that there is an audit trail to verify that allowances are paid legitimately and in compliance with HMRC expectations.

### Accommodation Allowance

2. Where an employee and their employer agree (such agreement not to be unreasonably withheld) that the employee needs to live away from home to work on the project, they will either be paid an accommodation allowance or reimbursed reasonable accommodation expenses, as mutually agreed. Any worker whose travel time from home to the nearest project park and ride facility typically exceeds 1 hour will normally be expected to lodge and receive accommodation allowance. In circumstances approved (and periodically reviewed) by HM Revenue & Customs, accommodation allowance payments are tax-free. The accommodation allowance will be paid at the rate of £43.27 per day or £302.89 per week. Accommodation allowance will normally be paid weekly, other than where the working week is broken.
3. If the employee is required to make a payment to retain their accommodation when it is not occupied and the employee is absent with permission, they will be paid a retainer payment, subject to providing appropriate evidence of expenditure. For public holidays and periodic leave, the retainer will be £12.70 per day: for annual holidays and sickness absence, it will be £7.32 per day.
4. If an employee receiving accommodation allowance is sick during a work period on site and needs to remain in their accommodation, the allowance may continue to be paid for up to 14 days as a special arrangement.

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<sup>19</sup> Travel and accommodation allowances in Appendix 3 and 4 are effective from 10 January 2023.



## NOT PROTECTIVELY MARKED

5. When an employee receiving accommodation allowance returns home for periodic leave, the allowance will be paid for the day on which they travel home from the site and for the day of the return journey. On the intervening days of holiday, a retainer will be paid as in paragraph 3.
6. If an employee remains in their accommodation over a holiday period, they will continue to receive accommodation allowance but not periodic leave transport expenses or travelling time payments.

### Daily Travel Allowances

7. Workers are responsible for getting themselves to work and arriving on time.
8. Daily travel allowances, measured one way from home to site, are for travelling time and costs.
9. There are two types of travel allowance set out in the table below. Table 1 applies to distances travelled to the nearest park and ride centre by the worker's own means (in accordance with the table below): table 2 is payable for distances travelled on the free transport provided by the project. (The main park and ride centres are indicated on the site area map below<sup>20</sup>).
10. Table 1 allowance is payable to local workers (i.e. workers who are not eligible for accommodation allowance) whose home is more than 8 miles from the nearest project park and ride facility<sup>21</sup>.
11. The distances used to calculate travel allowance will be measured by the fastest route option on the electronic RAC Route Planner.
12. Travel allowances will not be payable to: workers who are unavailable for work; or workers who arrive at work late or leave work early without the permission of their supervisor (such permission not to be unreasonably withheld).
13. Table 1 travel allowance provides compensation both for: the cost of travelling daily to and from site; and for the time spent travelling. Table 2 travel allowances provide compensation for travel time only and are payable to workers when travelling to work in transport provided free by the project.

Travel Allowances effective from 9 January 2023

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<sup>20</sup> Refer to Clarification Document No. 14, which can be found in the Common Framework Agreement

<sup>21</sup> Table 1 allowance is not payable to workers who receive accommodation allowance, unless: accommodation is not available within 10 miles of a main park and ride centre; and the contractor is satisfied that they are living as near to site as is reasonably achievable.

**NOT PROTECTIVELY MARKED**

**Table 1**

Miles		Travel from home to nearest project park & ride facility		
Over	Not over	Taxable (£ per day on site)	Tax Free (£ per day on site)	TOTAL (£ per day on site)
2	8	0.00	0.00	0.00
8	11	3.01	0.00	3.01
11	14	4.92	1.18	6.10
14	17	7.97	1.69	9.66
17	20	8.87	3.84	12.71
20	25	10.23	5.23	15.46
25	30	11.33	6.31	17.64
30	35	12.24	7.19	19.43
Over 35		13.07	8.06	21.13

**Table 2**

Miles		TOTAL (£ per day on site) (Bus Harmonisation Payment)
Over	Not over	
2	8	0.00
8	11	1.99
11	14	3.96
14	17	6.42
17	20	8.41
20	25	20.05
25	30	23.22
30	35	25.94
Over 35		28.34

Hinkley Point C Site Area Map



## NOT PROTECTIVELY MARKED

### APPENDIX 4. PERIODIC TRAVEL

1. Workers receiving accommodation allowance will be granted twelve paid weekend home visits each year. These visits will normally be scheduled once per month and arranged wherever possible to coincide with recognised holiday periods.
2. On commencement and termination of employment, workers entitled to accommodation allowance will be paid transport expenses, comprising fares or vouchers, reimbursed at full standard class single rail fares between the main line stations nearest to the site and the employee's place of residence<sup>22</sup>. In the case of periodic travel, transport expenses, comprising fares or vouchers, shall be reimbursed at full standard class return rail fares between these stations.
3. Workers receiving periodic travel expenses will also be paid travelling time of one hour at the basic rate for the first 30 miles and a half hour for each subsequent 20 miles or part thereof of the journey one way. Distances for the purpose of this clause are measured by the fastest route option on the RAC Route Planner.
4. Periodic travel expenses and travelling time are payable on the condition that the worker works up to normal finishing time prior to the periodic leave and returns to work on time on the next working day after the periodic leave.
5. If a worker resigns from their job on the project, periodic travel expenses and travelling time are not automatically payable for their journey home. However, the contractor will use reasonable discretion where a resignation arises from health or family reasons.
6. Where workers have to travel long distances to their home and suitable air services are available, the employer, at his sole discretion, may agree to the employees travelling by air. Transport expenses will consist of the standard air fare between the airports nearest to the site and the employee's place of residence plus rail fares between the airport and the station nearest to the site or the employee's place of residence. Travel time for the air flight portion of the journey will be one hour each way at the employee's basic rate.<sup>23</sup>

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<sup>22</sup> For clarification of the calculation of rail fares refer to Clarification Document No. 13 which can be found in the Common Framework Agreement

<sup>23</sup> For further information regarding the allocation of, payment for and taking of periodic leave, refer to Clarification Document 17 which can be found in the Common Framework Agreement

## NOT PROTECTIVELY MARKED

### APPENDIX 5. SPECIAL LEAVE

1. Bereavement leave will be granted to workers who suffer the death of a spouse, civil partner, child, parent, parent-in-law or sibling. In these circumstances, workers living at home will be granted up to 5 days' special leave: workers receiving accommodation allowance will be granted up to 10 days' special leave.
2. Contractors will use their discretion sympathetically in granting special leave in cases of worker bereavement. They will also use their discretion sympathetically in deciding whether or not to meet the cost of standard class return rail fare incurred by a worker in travelling home and back in such cases.
3. Special leave days will be paid for basic working hours that would otherwise have been worked, at basic rate.
4. Workers receiving their entitlement to statutory paternity pay will receive a top-up payment so that the total they receive for the special leave period equals gross pay at basic hourly rate for the normal hours they would otherwise have worked.
5. Maternity leave and maternity pay will be provided on the basis of the statutory maternity scheme. Contractors will ensure that pregnant employees are made aware of their maternity rights.
6. Contractors will use their discretion sympathetically and supportively when making decisions about requests for annual holiday or unpaid leave from workers who are not eligible for special leave but who need time off to care for family members.

**NOT PROTECTIVELY MARKED**

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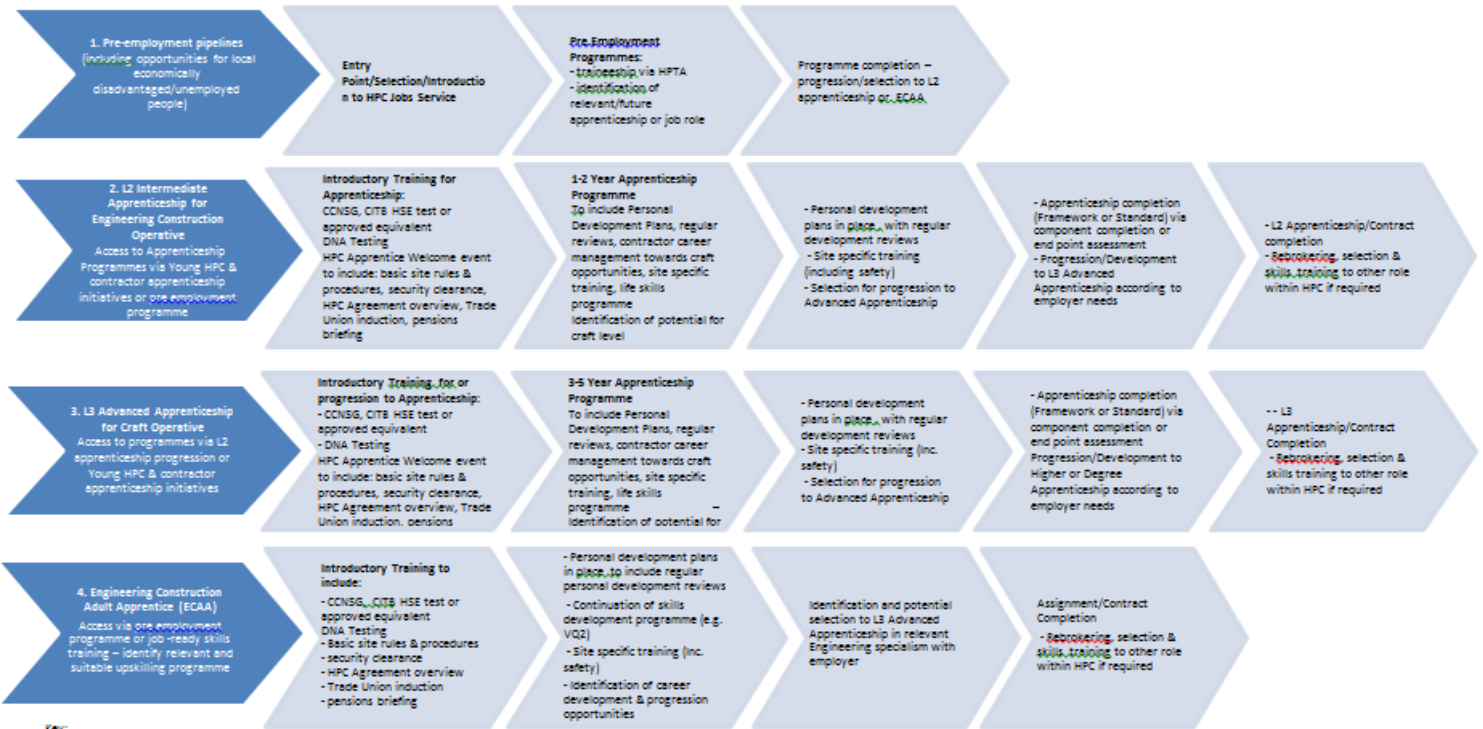
## **APPENDIX 6. GUIDELINES FOR PAYING RESPECT ON THE DEATH OF A FELLOW WORKER<sup>24</sup>**

1. Appropriate ways of paying respect on the death of a work colleague are:
  - a two-minute silence, agreed and communicated through the appropriate LJC;
  - attendance of a small number of work colleagues at the funeral, with sympathetic consideration given by the contractor to granting them paid special leave for the purpose under Appendix 5; and/or
  - collection of donations for the dependants of the deceased.
2. In the event of a death on site, contractors will use their discretion sympathetically in granting permission for workers in the immediate vicinity to leave the site for the remainder of the work period without loss of pay and allowances.
3. In the event of the death of a former work colleague (i.e. one who, at the time of their death, was not engaged to work on the site) contractors will use their discretion sympathetically in granting holiday or unpaid leave to a small number of ex-colleagues to attend the funeral.
4. Currently the monies, subject to conditions, that are available to the next of kin are:
  - The 2023 HPC conditional death benefit £50,000 payable in the event of no unauthorised stoppage of work that extends 6 months from termination of employment provided the person is not working;
  - A workforce collection;
  - An employer matched contribution of the workforce collection up to £5,000;
  - A client matched contribution of the workforce collection up to £10,000;

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<sup>24</sup> For further information regarding Sympathy Stoppages and their qualifying conditions, refer to Clarification Document 16 which can be found in the Common Framework Agreement

## APPENDIX 7. THE HPC ENGINEERING CONSTRUCTION APPRENTICE DEVELOPMENT JOURNEY



**Key:**  
HPTA: Hinkley Point Training Agency  
Government apprenticeship definition: aged 16 or over; combining working with studying for a work-based qualification - from GCSEs or equivalent up to degree level, paid at least the minimum wage; can be new or current employees and must work with experienced staff, learn job-specific skills, study for a work-based qualification during their working week (for example, at a college or training organisation) over 1-4 years, depending on the qualification level.

- Notes:**
- Apprenticeship content and qualifications will be to national standards (e.g. NVQ or BTEC)
  - Funding requirements to be identified for pre-employment and Access to Apprenticeship programmes
  - Training opportunities for apprentices will be provided through collaboration across employers, both within and beyond the HPC project

## NOT PROTECTIVELY MARKED

### APPENDIX 8. REDUNDANCY SELECTION

1. Where a contractor contemplates redundancies, they should seek to establish a methodology for selection decisions based on objective and verifiable evidence. The proposed methodology should be a subject for consultation. Potentially reasonable selection criteria include:
  - performance against relevant specified measures. (These measures may include attendance, timekeeping or disciplinary/ performance support procedure records); and
  - skills, qualifications and experience required to maintain a balanced workforce with the capability to deliver the remaining requirements of the project
2. Length of service with the contractor may be a selection criterion where it is necessary to differentiate between individuals who cannot be readily differentiated through the methodology established under paragraph 1.
3. Workers will have recourse to an appeals procedure where they wish to challenge a selection decision made in relation to them.
4. A contractor will share with the relevant site co-ordinating stewards, on a confidential basis, the names of workers at risk of redundancy following the selection process. Priority will be given to re-brokering such workers on the project in preference to redundancy.



**NOT PROTECTIVELY MARKED**

**APPENDIX 9. REDUNDANCY READY RECKONER**

**HPC Agreement redundancy payments ready reckoner**

**Notes**

1. The statutory maximum of a week's pay for redundancy payment purposes is **£571** with effect from **6 April 2022**
2. Subject to the statutory maximum, a week's pay includes base pay, overtime and any bonuses.
3. Where pay is variable from week to week, an average of the previous 12 weeks' pay is used in the calculation.
4. The HPC Sector Agreements provides for redundancy payments as set out in the table below.
5. The HPC scheme provides more beneficial redundancy payments at the lower end of the service spectrum.
6. Continuous service generally means uninterrupted service with your **current** employer.

Service (years)	≤ 26 weeks	≤ 52 weeks	≤ 2	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
18	1	2	4	6	6																		
19	1	2	4	6	6	6																	
20	1	2	4	6	6	6	6																
21	1	2	4	6	6	6	6	6															
22	1	2	4	6	6	6	6	6	6														
23	1	2	4	6	6	6	6	6	6	6													
24	1	2	4	6	6	6	6	6	6	6	6												
25	1	2	4	6	6	6	6	6	6	6	6	6 1/2											
26	1	2	4	6	6	6	6	6	6	6	6	7	7 1/2										
27	1	2	4	6	6	6	6	6	6	6	6	7	7 1/2	8	8 1/2								
28	1	2	4	6	6	6	6	6	6	6	6	7 1/2	7	8	8 1/2	9	9 1/2						
29	1	2	4	6	6	6	6	6	6	6	6	7 1/2	7	8	8 1/2	9	9 1/2	10	10 1/2				
30	1	2	4	6	6	6	6	6	6	6	6	7	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2			
31	1	2	4	6	6	6	6	6	6	6	6	7	8	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2		
32	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	10 1/2	11	11 1/2	12	12 1/2	13	13 1/2	
33	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	11 1/2	12	12 1/2	13	13 1/2	14	14 1/2
34	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	12 1/2	13	13 1/2	14	14 1/2	15 1/2
35	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	13 1/2	14	14 1/2	15	15 1/2
36	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	14 1/2	15	15 1/2	16 1/2
37	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	15	15 1/2	16	16 1/2
38	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	15	16	16 1/2	17
39	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	15	16	17	17 1/2
40	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	15	16	17	18
41	1	2	4	6	6	6	6	6	6	6	6	7	8	9	10	11	12	13	14	15	16	17	18
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46	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
47	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
48	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
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50	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
51	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
52	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
53	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
54	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
55	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
56	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
57	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
58	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
59	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
60	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2
61	1	2	4	6	6	6	6	6	6	6	6	7 1/2	8 1/2	9 1/2	10 1/2	11 1/2	12 1/2	13 1/2	14 1/2	15 1/2	16 1/2	17 1/2	18 1/2