

# Consultation on financial support for nuclear lifetime extensions

Closing date: 21 January 2026



© Crown copyright 2025

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <a href="mailto:nationalarchives.gov.uk/doc/open-government-licence/version/3">nationalarchives.gov.uk/doc/open-government-licence/version/3</a>.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

# Contents

General information	4
Consultation details	
How to respond	6
Confidentiality and data protection	6
Quality assurance	7
Context	8
The case for intervention	8
Assessment of impacts	10
Overall impacts on total welfare	10
Mitigating net zero delivery risk (societal impact)	11
Security of supply (societal impact)	11
Familiarisation costs (impact on businesses)	11
Bill impacts (impact on consumers)	11
Impacts on wider government priorities	12
Supporting nuclear plant lifetime extensions	13
Proposed Legislative Amendments	13
Eligibility	13
Public Sector Equality Duty	13
Environmental Principles Policy Statement	14
Consultation questions	15
Next stans	16

## General information

Nuclear generation plays a key role in the UK's energy mix, supplying baseload, low-carbon electricity to millions of homes and businesses. The continuation of this supply to the system is critical to ensuring that the UK can meet its Net Zero commitments while lowering system costs, supporting our energy security.

As the UK looks ahead to the additional supply from new nuclear projects, such as Hinkley Point C (HPC) and Sizewell C (SZC), it is important that existing generation can be maintained wherever it is feasible and safe to do so. International best practice shows that, in many cases, eligible operational nuclear plants can continue operating beyond their initially anticipated lifetime with appropriate investment.

Given the changing electricity market over coming decades, there may be circumstances where it is necessary for HMG to support the works required to extend the lifetime of operating nuclear plants. Capitalising on existing infrastructure and operating nuclear assets in this way can deliver value for money for consumers and benefits to the supply chain.

Contracts for Difference (CfDs) are tried and tested mechanisms designed to encourage investment into low carbon technologies, utilised across the energy sector. HPC has its own bespoke CfD.

This consultation seeks views on amending the CfD legislation to enable existing nuclear generating assets to be eligible for CfDs as a way of incentivising investment into lifetime extensions of operating nuclear plants, subject to all value for money considerations and relevant approvals.

#### Consultation details

**Issued:** 10 December 2025

Respond by: 21 January 2026

**Enquiries to:** 

Nuclear Projects and Development Department for Energy Security and Net Zero 1st Floor 3-8 Whitehall Place London SW1A 2EG

Email: lifetimeextensions@energysecurity.gov.uk

Consultation reference: Consultation on financial support for nuclear lifetime extensions

#### **Audiences:**

The Government welcomes views from statutory consultees, which includes the devolved governments, electricity suppliers, Ofgem and the National Energy System Operator. We also welcome responses from anyone with an interest in the policy areas.

#### **Territorial extent:**

**United Kingdom** 

## How to respond

The consultation period began on 10 December and will run until 21 January. You can respond using the <u>online form.</u> Please ensure that your response reaches us before the closing date. If you'd like further copies of this consultation document or require alternative formats (Braille, audio CD etc), please contact <u>lifetimeextensions@energysecurity.gov.uk</u>.

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation, please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

**Respond online at:** <u>energygovuk.citizenspace.com/nuclear/financial-support-for-nuclear-lifetime-extensions/</u>

or

Email to: lifetimeextensions@energysecurity.gov.uk

Write to:

Nuclear Projects and Development Department for Energy Security and Net Zero 1st Floor 3-8 Whitehall Place London SW1A 2EG

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our <u>privacy policy</u>.

We will summarise all responses and publish this summary on <u>GOV.UK</u>. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

## Quality assurance

This consultation has been carried out in accordance with the <u>government's consultation</u> <u>principles</u>.

If you have any complaints about the way this consultation has been conducted, please email: <a href="mailto:bru@energysecurity.gov.uk">bru@energysecurity.gov.uk</a>.

## Context

Investing in the future of nuclear energy generation in the UK is central to the government's mission of making Britain a Clean Energy Superpower, delivering a secure supply of low-carbon energy. By producing baseload power wholly within the UK, nuclear energy can work alongside renewable power sources, supporting price stability for consumers and minimising reliance on fossil fuels. It also reduces reliance on imports from international actors crucial during geopolitical volatility, underlined following Russia's invasion of Ukraine.

With new nuclear projects already in mature stages of development at HPC and SZC, it is key that wherever possible existing generating assets can continue to operate for as long as they are safely able to do so. The continued operation of existing nuclear plants will protect consumers and billpayers by avoiding the need for the equivalent generation to be sourced through alternative, more costly methods. There is strong international precedent for extending the operating lifetime of nuclear power plants in order to support grid stability and energy security.

Over the course of the next 10 years, the UK's existing operational nuclear fleet in its entirety is set to begin decommissioning, with the 4 Advanced Gas-Cooled Reactors (AGRs) currently expected to come offline between 2028-2030, and Sizewell B (SZB), the UK's only Pressurised Water Reactor, due to begin decommissioning in 2035. Against this background, there may be a case to provide an appropriate underlying commercial model to promote investment in the works needed to safely extend the operating lives of nuclear plants. This could help to ensure a smooth transition as additional nuclear generation capacity is brought online. It could also support the Government's Clean Energy Superpower mission through the continued supply of low carbon, baseload energy to the grid for as long as possible.

This consultation seeks views on how lifetime extensions can be facilitated and the required investment unlocked.

### The case for intervention

Aligned with the Clean Power 2030 action plan<sup>1</sup>, the majority of future power generation will come from renewable sources. However, analysis demonstrates low-carbon technologies such as nuclear are required in tandem to lower the overall cost of the electricity system.<sup>2</sup>

Whilst capital costs for nuclear projects tend to be higher than for alternative energy sources, the operational and fuel costs are lower. As shown by other examples across the world, extending the lifetime of an existing nuclear plant are generally lower than the comparative costs of new build plants. There is a strong case for HMG to support nuclear to overcome persistent market failures. Large-scale nuclear power plants have characteristics that mean the

<sup>&</sup>lt;sup>1</sup> Clean Power 2030 Action Plan - GOV.UK

<sup>&</sup>lt;sup>2</sup> Modelling 2050: Electricity System Analysis

market is likely to underinvest in them, relative to their value to society, without government intervention. Security of energy supply is a public good, and investors are not sufficiently incentivised to deliver it. Nuclear power plants produce 'firm power' that is not dependent on the weather. This complements intermittent renewables and provides reliable baseload generation to help ensure security of low-carbon electricity supply.

If all the existing nuclear power plants in the UK are decommissioned in line with current expectations, around 15% of the current electricity supply on the grid will be lost by 2035<sup>3</sup>. Whilst it is the current expectation that most, if not all, of this generating capacity will need to be replaced, there is a strong value for money case to try and avoid, wherever possible, the higher associated costs in the shorter term of introducing new technologies onto the system if a viable, low carbon alternative is available.

There are international examples of Government intervention in the extension of nuclear power plants. In February 2025, the EU Commission confirmed that a Contract for Difference (CfD) had been agreed by the Belgian Government and was deemed appropriate and proportionate within EU State Aid rules to support the extension of two nuclear plants in Belgium<sup>4</sup>.

HMG is therefore exploring the potential use of CfDs to incentivise the extension of operational nuclear power plants. The Contracts for Difference (CfD) scheme is HMG's main mechanism for supporting new low carbon electricity generation in Great Britain. Nuclear electricity generation is already eligible for support under the CfD Scheme for new-build capacity; a CfD was utilised to provide financial incentivisation to support the construction of HPC. However, nuclear power stations that are intending to undergo refurbishment to extend their lifetimes to provide a continuation of electricity to the system are not currently eligible for contracts under the CfD Scheme.

A Contract for Difference (CfD) is a private law contract between the Low Carbon Contracts Company (LCCC) and an eligible low carbon generator. LCCC was set up by government as an independent contractual counterparty. The LCCC operates the Contracts for Difference scheme, the Low Carbon Hydrogen Agreement (LCHA), and via the Electricity Settlements Company (ESC) administers the Capacity Market (CM). LCCC is also the Revenue Collection Counterparty for the nuclear Regulated Asset Base (RAB) funding model. Generators cannot simultaneously benefit from a CfD and any other support mechanism.

Under a CfD, the generator receives a fixed price for generation, indexed to inflation (CPI), over the period of the contract. In standard allocation rounds, the strike price is determined via a competitive auction. The generator retains responsibility for selling its generation in the wholesale market and receives difference payments from LCCC when the relevant wholesale price is below the strike price. The generator must make difference payments to LCCC when the strike price is below the wholesale prices. Difference payments are funded by a statutory levy – the Supplier Obligation – on all licensed electricity suppliers, so are eventually passed on to households and businesses through their electricity bills.

<sup>&</sup>lt;sup>3</sup> Nuclear Power in the United Kingdom - World Nuclear Association

<sup>&</sup>lt;sup>4</sup> Commission approves Belgian State aid measure

The CfD scheme is fundamental to achieving the government's goal of a fully decarbonised power supply, whilst achieving value for money for electricity customers. It protects consumers when electricity prices are high, and provides income stabilisation for generators, generally for a 15 or 20-year term (depending on the technology type), though term-length can vary for bespoke CfDs, such as that agreed for HPC<sup>5</sup>.

Nuclear power, especially where the generator is supported by a CfD, can lower prices and potentially support price stability. Evidence of the potential severity of energy price volatility has been seen through dramatic spikes in electricity wholesale prices in the past few years; the Low Carbon Contracts Company's (LCCC) Baseload Market Reference Price increased from £45/MWh in winter 2020, to £102/MWh in winter 2021, to £405/MWh in winter 2022, before falling to its recent £84.75/MWh in winter 2025<sup>6</sup>. At this time, the nuclear fleet was operating on a merchant basis, meaning that they tracked the wholesale price, rather than maintaining a fixed strike price under a CfD to ride out periods of volatility. While separate measures such as the Electricity Generator Levy have since been introduced to curb windfall gains during extreme price spikes, CfDs remain a structured and transparent mechanism for long-term price certainty for consumers.

We are seeking views on a proposed legislative amendment which would allow lifetime extensions of nuclear power plants to be eligible for CfDs. We intend that any such support only to be provided in instances when it is clear that the generator would not have sufficient financial incentives to invest in refurbishment to allow the continuation of capacity, without any such intervention from the government. Any government intervention will be subject to a full value for money assessment and all relevant approvals.

## Assessment of impacts

We have considered the overall and stakeholder impacts of this intervention, as well as the impacts on wider government priorities. If introduced, an impact assessment will be published alongside legislation.

#### Overall impacts on total welfare

The overall impact of this measure on total welfare is driven by the positive impact of mitigating net zero delivery risk and improving security of supply, against the negative impacts of familiarisation costs and bill impacts. Extending a nuclear plant with a CfD could reduce the cost of the electricity system compared to an alternative net zero compliant technology mix. The impact on consumers will depend on the agreed strike price. Any arrangement will be subject to a full value for money assessment.

<sup>&</sup>lt;sup>5</sup> Hinkley Point C CfD

<sup>&</sup>lt;sup>6</sup> Baseload Market Reference Price Winter 2025 published

#### Mitigating net zero delivery risk (societal impact)

There is broad consensus that a balance of firm, intermittent and flexible generation is required for a low-cost, low emission power sector. For example, *Modelling 2050: Electricity System Analysis*<sup>7</sup> concluded that, alongside renewables, all low-cost solutions require other forms of low carbon generation (such as nuclear) to provide resilience during extended periods of low wind and solar irradiation. NESO also model c.11-22GW of nuclear in their Future Energy Scenarios 2025 scenarios<sup>8</sup>, with lower scenarios relying more on hydrogen deployment.

If a nuclear plant is awarded with a CfD for a life extension, this will secure and maintain low carbon capacity in the electricity system. This would help mitigate the delivery risk of needing to deploy other low carbon technologies at ambitious capacity levels in order to meet the UK's net zero obligations. Aiming to deploy a variety of technologies that provide low carbon power can help reduce delivery risk. This is a secondary impact, as the extension itself will need to be realised.

#### Security of supply (societal impact)

Nuclear power provides security of supply benefits. Nuclear power plants produce 'firm power' that is not dependent on the weather, ensuring the market benefits from a secure, low-carbon electricity supply. Without this baseload generation, the potential for blackouts, the need for management of energy supply, and greater reliance on interconnectors increases. Extending nuclear plants will therefore lead to security of supply benefits and a potential reduction in system costs.

#### Familiarisation costs (impact on businesses)

Businesses working on nuclear or in the relevant supply chain may want to familiarise themselves with the new regulations that apply to nuclear power plants. We expect it would be of particular interest to businesses that own relevant nuclear power plants that could be extended with a CfD. This would lead to familiarisation costs, based on the time taken for relevant employees to read and understand the legislation. This is a direct impact, although it is important to note that businesses are not required or obligated to familiarise themselves with the legislation.

#### Bill impacts (impact on consumers)

A CfD will add a levy payment to consumer bills when the strike price is higher than the wholesale price. The size of the impact will depend on the number of nuclear plants awarded with a CfD for life extension, how much those plants generate, the strike price, the length of the contract and future wholesale prices. This is a secondary impact, as it requires nuclear plants to be extended with a CfD for it to be realised.

<sup>&</sup>lt;sup>7</sup> Modelling 2050: electricity system analysis. Available at: <a href="https://www.gov.uk/government/publications/modelling-2050-electricity-system-analysis">https://www.gov.uk/government/publications/modelling-2050-electricity-system-analysis</a>

<sup>&</sup>lt;sup>8</sup> <u>Future Energy Scenarios (FES) | National Energy System Operator.</u> Available at: https://www.neso.energy/publications/future-energy-scenarios-fes

#### Impacts on wider government priorities

**Business environment:** This measure is not expected to have an impact on the ease of doing business in the UK.

**International considerations:** This measure is not expected to impact international trade and investment.

**Natural capital and decarbonisation:** This measure will have a positive impact on decarbonisation. Nuclear power is commonly understood to have lower lifetime emissions than alternative low carbon sources<sup>9</sup>. We also expect any wider natural capital and environmental impacts to be relatively smaller for nuclear plant extension compared to new builds.

<sup>&</sup>lt;sup>9</sup> Carbon Neutrality in the UNECE Region: Integrated Life-cycle Assessment.

# Supporting nuclear plant lifetime extensions

## **Proposed Legislative Amendments**

#### Eligibility

The Secretary of State uses the powers in section 10 of the Energy Act 2013 to direct the counterparty (LCCC) to offer a CfD to a generator.<sup>10</sup>

The Secretary of State can only direct LCCC to offer a CfD to a generator which falls within the definition of an 'eligible generator' (see section 10(2) of the Energy Act 2013). The definition is set out in the Contracts for Difference (Definition of Eligible Generator) Regulations 2014.<sup>11</sup>

To meet the definition of an eligible generator, a generator must be intending to carry out a generating activity in relation to an eligible generating station (which includes a nuclear power station). The current definition of 'carry out a generating activity' means that a nuclear generator is only eligible for support where it is intending to establish a generating station, alter an existing station to either increase the generating capacity by 5 megawatts or more or to connect the station to a complete CCUS system, or to alter an eligible generating station by decommissioning part of it in order to replace that part.

We are proposing to amend the definition of 'carry out an eligible generating activity' in regulation 3 of the Eligible Generator Regulations to include the continuation of electricity generation by a nuclear power station by way of a life extension project. This is because the support is aimed at ensuring existing nuclear infrastructure is capitalised on for long term energy generation.

1. Do you have any comments on the proposed legislative amendment set out above, which would enable nuclear plant lifetime extensions to be eligible for CfDs?

# **Public Sector Equality Duty**

The government has considered the potential impact of the policy on individuals. This in turn supports an assessment of the potential impact on protected characteristic groups (PCGs) of the proposed amendment, to ensure that obligations under the Public Sector Equality Duty (PSED) are adhered to. The emerging assessment is that the main areas that have impacts on individual citizens, and therefore should be considered alongside the PSED, are:

<sup>&</sup>lt;sup>10</sup> Energy Act 2013

<sup>&</sup>lt;sup>11</sup> The Contracts for Difference (Definition of Eligible Generator) Regulations 2014

- Potential electricity bill impacts for consumers extending the lifetime of existing nuclear assets is likely to reduce electricity system costs.
- Potential impacts on the workforce and employment opportunities extending lifetimes of nuclear infrastructure will mean that existing jobs are maintained for longer, and new jobs could be created to support refurbishment to support the lifetime extension.
- 2. Do you believe that the proposed amendment could have an impact on people with protected characteristics and what form would these impacts take? Please provide evidence to support your answer.

# **Environmental Principles Policy Statement**

In line with the Environment Act 2021, Ministers must have due regard to the Environmental Principles Policy Statement (EPPS) when making policy. The government considers that the proposed amendment aligns with the environmental principles of sustainability, integration, and prevention. By maximising the use of existing infrastructure and avoiding unnecessary new build where feasible, the policy supports efficient resource use and minimises environmental disruption.

In considering environmental hazards, we have assessed the implications for decommissioning and are satisfied that robust mechanisms exist to manage these costs. Existing nuclear plants (the AGR fleet and SZB) are covered by the Nuclear Liabilities Fund (NLF), while new builds post-2008 have funded decommissioning plans in place under the Funded Decommissioning Programme (FDP) arrangements.

3. Do you have any further views on the proposed amendment's interaction with the environmental principles?

# Consultation questions

- 1. Do you have any comments on the proposed legislative amendment set out above, which would enable nuclear plant lifetime extensions to be eligible for CfDs?
- 2. Do you believe that the proposed amendment could have an impact on people with protected characteristics and what form would these impacts take? Please provide evidence to support your answer.
- 3. Do you have any further views on the proposed amendment's interaction with the environmental principles?

# Next steps

This consultation will be open for 6 weeks, closing on 21 January. Following the close of this consultation, we will analyse the responses, summarise the views expressed and set out final conclusions in a government response. We will publish this on the GOV.UK website within 12 weeks of the close of the consultation.

This publication is available from: <a href="https://www.gov.uk/government/consultations/financial-support-for-nuclear-lifetime-extensions">www.gov.uk/government/consultations/financial-support-for-nuclear-lifetime-extensions</a>
Any enquiries regarding this publication should be sent to us at: lifetimeextensions@energysecurity.gov.uk
If you need a version of this document in a more accessible format, please email <a href="mailto:alt.formats@energysecurity.gov.uk">alt.formats@energysecurity.gov.uk</a> . Please tell us what format you need. It will help us if you say what assistive technology you use.