



Department for
Energy Security
& Net Zero

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Dear All,

Thank you for your contributions at the recent backbench debate on the Civil Nuclear Roadmap and current nuclear consultations. I committed to writing to you to answer the points raised.

I will first turn to a point that several members made regarding the Geological Disposal Facility (GDF). The Government is committed to implementing geological disposal for the long-term, safe and secure management of the UK's most hazardous radioactive waste. Geological disposal is considered the best option internationally, being pursued by several countries, and is recommended by the advisory Committee on Radioactive Waste Management (CoRWM). Successfully implementing a GDF is vital not only to our new build nuclear programme, but also to the successful decommissioning of the UK's civil nuclear legacy and defence programme.

The process to identify a suitable site for a GDF in England and Wales is a consent-based approach, requiring positive support from a willing community together with a suitable site, and progress is being made. Three communities are currently taking part in the process – two in Copeland, west Cumberland, and one in Theddlethorpe, Lincolnshire. You can find out more about geological disposal and our process to identify a suitable location here: [Implementing Geological Disposal – Working With Communities](#).

Regarding the timescales, it is estimated that the siting process, which includes extensive geological investigations, could take 15 to 20 years, with initial construction of the facility taking 10 years. A GDF is expected to be operational in the 2050s. This timescale compares favourably with other countries using a consent-based process to implement geological disposal. For example, Finland began its process in 1983 and began construction in 2016 with the facility due to be operational by the mid-2020s.

This leads me onto the work we are undertaking in the skills area. As mentioned in my closing remarks, we expect the nuclear sector workforce to double in the next two decades and, in response to this challenge and recognising that we cannot close the skills gap without urgent collaborative action, we have worked with the Ministry of Defence to launch the Nuclear Skills Taskforce.

The Taskforce will set out the action needed to ensure the UK nuclear sector will have sufficient and appropriate nuclear skills to deliver our nuclear ambition. I am sure you will join me in looking forward to seeing the Taskforce's recommendations in due course.

I would next like to answer the points regarding the speed with which we are delivering nuclear power. The Government committed to a programmatic approach to the delivery of new nuclear projects and established Great British Nuclear (GBN) to help deliver the UK's nuclear programme. GBN launched the Small Modular Reactor (SMR) Technology Selection Process in 2023 and announced in October the six vendors whose designs had been down-selected to proceed to the next stage. The designs chosen were considered by GBN to be those most able to deliver operational SMRs by the mid-2030s. The next phase of the competition has now launched, allowing vendors to now bid for potentially multi-billion-pound technology development contracts. Companies will have until June to submit their tender responses. GBN will then assess these and negotiate final contracts, prior to announcing successful bidders later in 2024.

However, I would like to repeat, as per my remarks, that nuclear is subject to scrutiny and regulation, and rightly so, cautious planning and adherence to correct procedure are a necessity when discussing nuclear power. It is a slow process, but a diligent one. Government has been working closely with the regulators on this for some time since, where we are able to streamline regulatory processes without watering-down vital protections, we should do so.

Regarding siting and the current consultation, on 6 March, the Government announced that GBN is buying sites at Yns Mon / Wylfa (Anglesey) and Oldbury-on-Severn (Gloucester). Nuclear sites are essential for the UK's civil nuclear programme and decisions on the projects and technologies to be deployed at sites will be made in due course. I also welcome contributions to the consultation on a new approach to siting nuclear power stations beyond 2025, which remains open until 10th March.

Concerning the point raised about delays to EN7, it is the Government's intention to publish this for consultation later this year and, subject to parliamentary process, to designate it in 2025.

Regarding Hinkley Point C, I reiterate that it is not a government project and EDF is responsible for the delivery. The Government is not directly exposed to any cost or schedule overruns and any additional cost incurred during construction are the responsibility of EDF and its partners on the project. This will not fall on taxpayers or consumers. That said, once online Hinkley Point C will provide 3.2 gigawatts of secure, low carbon electricity for around 60 years, meeting around seven percent of Great Britain's current electricity demand to power around six million homes.

Also, as an 80 percent replica of Hinkley Point C, our next project, Sizewell C, will benefit from lessons learned and established supply chain of Hinkley Point C, the benefits of which are already being demonstrated between units one and two. Site- and project-specific considerations for Sizewell C are a crucial part of project development and due diligence. For instance, on the point raised on differing ground

conditions between Hinkley and Sizewell, Sizewell C has undertaken an extensive, multi-year site characterisation exercise.

Several questions were also asked about our policy options for financing new nuclear projects, the Contract for Difference (CfD) and Regulated Asset Base (RAB) models. The Government has legislation in place to support both of these models. As set out through passage of the Nuclear Energy (Financing Act) 2022, and in the Alternative Routes to Market for New Nuclear Projects consultation, the nuclear RAB model has the potential to reduce the cost of private finance for new nuclear projects by sharing risk between investors and consumers. Unlike the CfD model, the RAB model also allows the generating company to receive payments during construction. For this reason, the RAB model may be better suited to projects that carry a high degree of cost and schedule risk during the construction phase and the department welcomes views via the Alternative Routes to Market consultation on funding models for Advanced Nuclear Technologies (ANTs).

A specific point was also raised about Early Cost Recovery models used to fund specific nuclear projects in the United States. Assessments of these were made during development of wider RAB policy, which identified a number of areas and lessons to learn from these projects, which influenced our proposals for the RAB model. These include how costs were passed on to consumers in the event of overruns, the level of regulatory oversight and how incentives were established for projects to be delivered to cost and schedule, and suitable disincentives for abandoning projects. We also noted common project-specific issues including the maturity of design work at start of major construction, the experience of the supply chain, and the project management structures in place. We have sought to mitigate against these by requiring projects to demonstrate they are suitably mature to benefit from RAB funding, and by undertaking robust due diligence of project proposals prior to any final investment decisions.

As I am sure you will agree, the Civil Nuclear Roadmap marks a crucial forward step in the regeneration of the nuclear industry in the UK, one that has not been seen in 70 years.

I shall place a copy of this letter in the library of the House.

Yours aye,

A handwritten signature in black ink, appearing to be 'Andrew Bowie', written in a cursive style.

Andrew Bowie MP
Minister for Nuclear and Renewables