

Written evidence submitted by Cwmni Eginio

Introduction

Cwmni Eginio was established in 2021 by Welsh Government to deliver a site development plan for Trawsfynydd, focused on socio-economic growth. Since then, there is increased policy focus on new nuclear power generation as a means of delivering net zero and increasing energy security. We have defined our vision to achieve both aims:

'By 2027, Trawsfynydd will be the site of the first SMR/AMR under construction in the UK; North Wales will be recognised as a centre of excellence for low carbon energy; and people's quality of life will be improved'

Despite the increased focus on new nuclear, delivery remains challenging and uncertain. Therefore, Cwmni Eginio plans to follow a staged approach to development, matching investment with increased certainty. The first stage is to confirm the business proposition for Trawsfynydd, that it is viable and has good prospects for successful delivery. We intend to complete this first stage by end March 2023 together with the business plan for the second stage of development.

Our approach is to assess all SMR technologies that expect to be ready to start construction by 2027 and decide which offers the best prospects in terms of meeting the UK and Welsh Government targets for net zero, socio-economic growth for North Wales and supports the levelling up agenda. We propose to work with the selected technology provider and NDA in partnership to develop the project. We intend to carry out the technology assessment this year.

Evidence

What role can, or should, nuclear power play in achieving net zero and UK energy security?

We support the UK Government's target of 24 GW of nuclear generation capacity by 2050. We believe that nuclear is necessary to meet net zero targets as part of a broad mix of low carbon technologies. New nuclear will provide a reliable source of baseload energy to complement the power generated from renewable sources.

As well as achieving net zero and UK energy security, nuclear can also play a role in meeting the levelling up agenda by providing significant socio-economic growth opportunities, including job creation, skills and supply chain development for local communities and the wider regional and national economies.

What are the main challenges to delivering the UK Government's commitment to bring at least one large-scale nuclear project to final investment decision by the end of this Parliament?

Sizewell C is the only realistic option for final investment decision by the end of this Parliament. We look forward to a successful outcome to the current discussions to enable the project to proceed and to build confidence in the future for nuclear new build.

The Nuclear Financing Act provide a new approach to financing new nuclear, adapting the Regulated Asset Base (RAB) model that is widely used in other utility businesses. It is an important step forward in addressing the barriers to financing new nuclear projects. Successful conclusion of these discussions on Sizewell C is the key measure of success of the overall nuclear programme and the RAB financing model.

The Nuclear Financing Act is designed to support nth of a kind development, relying on experience for earlier deployments (Hinkley Point C in the case of Sizewell C) to provide assurance on cost, schedule and risk. It is unclear how the RAB model could be applied to deployment of first of a kind SMR projects. UK Government needs to consider this in due course.

The key barrier to deployment of new nuclear is development risk. Currently, development is market-led. All the costs (which amount to £100s m) are borne at risk with no commitment by UK Government until financial investment decision is reached. This is not sustainable and we hope this issue will be addressed through the role of Great British Nuclear. As a minimum developers need UK Government to commit to the project at a much earlier stage in the development process so developers can be confident the Government wants the project to be developed. In particular, action needs to be taken during the current Parliament to identify specific nuclear projects for approval in the next Parliament, including Small Modular Reactors.

Our ambition is for Trawsfynydd to be first site SMR and therefore one of the projects to be contracted to the next Parliament.

How important is the finance model to ensuring a successful nuclear project, and is the regulated asset base (RAB) model the best one to deliver this?

Delivering the 24 GW by 2050 programme will require investment of ~£150-200 bn therefore it will be critical to be able to attract private finance. Private investors will only invest if they understand the risk profile. Horizon demonstrated that conventional financing would not work due to risk.

We believe that the UK Government was right to intervene and the RAB model provides a different risk profile for private investors that draws on the approach that has been used successfully in the water and power transmission and distribution sectors.

We would like to see the RAB model extended small scale nuclear projects, including the deployment of SMRs.

The Government should also consider granting RAB licence during the development phase so that investors can start earning a return. This approach would also demonstrate commitment by Government in the project at an earlier stage and thereby help to address development risk.

It is important to recognise that RAB provides a return on investment from the time the investment is made rather than when the plant starts to generate revenue. This significantly reduces the overall cost of financing and hence the cost of electricity. However, the funding still needs to be provided either by Government or the private sector.

What practical steps can the UK Government take to support the nuclear industry in developing a range of nuclear technologies, including small modular reactors?

The UK Government is already providing support for AMR & SMR technology development, e.g. UK SMR.

It has announced the Future Nuclear Enabling Fund (FNEF) that could provide upto to £120m to help remove barriers to development. We believe that this should be targeted at specific projects rather than technology development to make sure there is a pipeline of projects that can meet the target of 24GW by 2050. Cwmni Eginio has registered interest and proposes to submit an application for funding when the application process opens.

Whilst FNEF is a welcome step forward, it is unlikely to be sufficient., Developers will need to secure other sources of funding. This will only be possible with a clear commitment and support from UK Government. It is vital that there is long-term programme for the deployment of nuclear, including small scale projects, so that the industry has greater certainty in the future programme and required investment. We hope this will be a key part of GBN's role.

What would the likely cost be to the taxpayer of the UK Government supporting the development of a new nuclear power station at Wylfa?

We are unclear who is sponsoring the development at Wylfa and the role UK Government proposes to take.

It is critical to focus on benefits as well as cost for any project. We can expect Wylfa to offer significant benefits in terms of low carbon generation and socio-economic opportunities.

The focus of Cwmni Eginio is development at Trawsfynydd. We will explore synergies with any development at Wylfa, including opportunities for supply chain development and skills.

What is the potential economic impact for Wales of a new nuclear power station at Wylfa?

We are unable to comment on Wylfa. At Trawsfynydd, studies have indicated that SMR deployment could create over 400 long-term jobs in the local area and around £611m GVA for North West Wales and £1.34bn GVA pan-Wales during over an operational life of ca. 60 years.

As well as yielding benefits for the local, regional and national economies over several generations, SMR development at Trawsfynydd could also address wider socio-economic challenges such as reversing outward migration, creating sustainable communities, and enhancing the Welsh language and culture.

The development would further connect the Welsh and UK nuclear supply chains, especially through the North West Nuclear Arc – which extends from Anglesey to Cumbria. It could also be accompanied by additional academic or industrial research facilities and further research reactors, which would provide opportunities to build on current R&D capabilities and increase the export potential of the Welsh nuclear sector and its supply chain.

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