

## **NGO Forum 15 December 2023 – Meeting 1 of 2.**

### Welcome/Intros

The Nuclear Power, Infrastructure and Decommissioning Director, Chris Heffer (CH) opened the forum and welcomed attendees. He noted that whilst it had been the intention to hold a full forum meeting before the end of 2023, a number of key documents which would be of interest to members were due for publication after Christmas. There would therefore be a further meeting in the new year to ensure members had the chance to talk these over in detail. This proposed meeting will be in addition to those which would normally be scheduled during the year. CH apologised for not being able to secure Minister Bowie's time for a visit to Sizewell C in Suffolk, however, the Nuclear Projects Delivery Director, Caroline Botwood, had been able to attend and meet with forum members.

Alison Downes (AD) also welcomed forum members; she then expressed her disappointment that Minister hadn't visited Sizewell C as had been expected.

### Planning reforms

David Wagstaff, Deputy Director for Energy Infrastructure Planning (DW) provided an update on Planning Reform, explaining the intention to accelerate planning through increasing efficiency of the process, as extended holdups in planning applications would jeopardise the achievement of Net Zero by 2050. He emphasised that the new application process is designed to maintain current requirements to consider environmental harm. Forum members questioned how environmental assessments could be speeded up, stating that, in their opinion, the balance is already strongly in favour of the developer and noting the recent application which had been subject to court ruling and which had been inadequately prepared. DW emphasised that the need for, and quality of, environmental assessments has not changed but explained that the process is being made more efficient (quality of documents over quantity). He emphasised that the pre-application phase of planning is the most important and needs to be done well. He noted that the recent judgement in favour of developers came from the High Court and was a legal judgement.

### Waste Decommissioning

Umran Nazir (UN) outlined the consultation on decommissioning and radioactive policy that had been conducted earlier in the year. He outlined its two constituent parts; firstly, it takes a risk-informed approach to the decommissioning of Intermediate Level Waste and Low-Level Waste. This has now been consulted on internationally with a response due to be published in the new year. Secondly, a number of different policy areas have now been brought into one document, constituting an updated policy position, as the regulators wanted. The forum members asked UN: which risks could be identified and how these risks are communicated to affected communities; how the devolved nations are included or excluded due to their own policy position, and whether the document is being used to push through new policies without due oversight or consultation. UN responded that there will be no additional risks and noted that the suggested process should enable quicker and safer decommissioning, which would be subject to oversight by the Environment Agency (as is embedded in current process). He confirmed that there is engagement with the devolved nations and noted that the document represents the joint and separate positions of them, and has been in development for three years, and has been presented to the Forum previously. CH wrapped the conversation up with a brief summary.

## Green Taxonomy

Ruairi Cuddy (RC – Policy Manager, Subsidy Regulation) gave a brief update on HMT Green Taxonomy and how this relates to nuclear. He explained that the objective is to enable investors to select genuinely green investments and reduce greenwashing. Subject to a consultation which is due to be run in 2024, nuclear will be classified as a green energy source. RC was asked why this consultation had been delayed and explained that the number of Government Departments involved, who also have competing priorities, made it a complex piece of work. He was unable to pre-empt the content of the consultation but stated that lessons are being learned from the EU and that there is expected to be relatability across the taxonomy.

## EN6 and Nuclear National Policy Statement

Tonima Saha (TS), Head of Nuclear Generation Policy and Regulatory Frameworks confirmed that a consultation is shortly to be published on the siting element of the new nuclear national policy statement which will feed a new EN7. It was confirmed that a separate Habitats Regulations Assessment would be produced for the new nuclear NPS. Timings are to be confirmed.

## Funding

AD raised the question of funding, noting that there had been press reports of a funding shortfall at Hinkley Point C and flagging that, in this context, government putting money into Sizewell C appears incongruous. CH stated that he understood there was a Hinkley Point C Board Meeting due shortly but that questions should be directed at HPC. He noted that the risk sits with EDF and funders and that this protects taxpayers. AD raised the risky nature of these projects and stated that the risk for Sizewell C would fall on consumers. CH highlighted the different funding model for Sizewell C. AD said that the cost savings of this would be absorbed by the additional needs of Sizewell C, which is a complex site and difficult to develop. Chris W from Together Against Sizewell C (TASC) stated that there were no final costings for Sizewell C; CH said he would raise this with colleagues as no Sizewell C representatives were on the call, partly due to the recent visit of the Director responsible for the Sizewell C development earlier in the week, which was the opportunity for SZC related questions. JS therefore requested that this question be put in writing in order to enable a response.

## Logistics

Jon Sutton (JS) advised that some elements of Minister Bowie's portfolio have changed but that he would be retaining the nuclear element and therefore remains the Minister associated with this forum. Work would begin to align diaries to ensure a future visit to Sizewell C.

A further forum meeting will be arranged in the new year following publication of the Roadmap, Consultation on Alternative Routes to Market and Siting Consultation.

AD requested that the development consent order is not triggered before Minister Bowie has visited Sizewell C as he had promised. JS noted. Forum members requested copies of the January publications and CH confirmed that efforts would be made to ensure that they have timely notification of the documents.

AD and CH thanked members and officials for their attendance.

## **Meeting 2 of 2 19 January 2024.**

Chris Heffer (CH) and Alison Downes (AD), who were co-chairing the Forum, welcomed the attendees and noted that both parties were keen to hold the meeting following the January nuclear publications. AD noted mention of this forum in the Nuclear Roadmap and stated her appreciation of the opportunity to share views; she noted that ONR has emphasised the value of this Forum. CH agreed that it is important to empower Civil Society to have a voice; this is an important forum, and he is delighted that there is a national NGO forum meeting on a regular basis.

CH outlined the agenda, confirming that the January publications would be covered first with Sizewell C addressed at the end.

### **1. Nuclear Roadmap**

Alastair Findlay (AF) gave an update on the publication of the Nuclear Roadmap and opened up the floor to questions.

The questions / issues posed, and responses given, were as follows:

#### 1. Is nuclear cheaper in the long term?

Under a high electricity scenario, the overall cost of electricity is cheaper with the 24 GW of nuclear in the baseload. The work that is being undertaken is building up to this (24GW is an ambition but not necessarily a target) and there will be Value for Money assessments on a project-by-project basis.

#### 2. What is the timing for the Green Taxonomy Consultation?

It is slated for Quarter 1 of this year; therefore, the presumption is that this will happen at the end of March.

#### 3. Can there be a follow-up meeting to discuss the interface between civil and defence nuclear projects.

There are interfaces both in supply chain and in skills. However, there is a practical line around safeguarding and security which needs to be held. AD requested a meeting on this subject, to include academics. CH agreed to receive AD's thoughts on what this could look like - his and follow—this will be done outside of this Forum.

#### 4. Will HALEU be used in European Pressurised Reactors (EPRs) at Hinkley Point C and Sizewell C?

HALEU is not used for EPRs; it's for future Advanced Modular Reactor (AMR) technology or medical usage.

#### 5. Given that the Dynamic Dispatch Model (DDM) is being replaced, will the "cheaper in the long term" assertion be reassessed?

CH stated that although, unfortunately, there were no analysts on the call to provide a detailed answer, major changes in the modelling results are not expected. AD stated that the Department had confirmed that DDM would be the model for SZC.

#### 6. A concern was raised regarding how the large-scale output of the big reactors can be managed on the electricity system.

There was agreement that this is a challenge, and the Forum was informed that work is ongoing on grid and networks. CH suggested that this should be discussed in more detail at a future meeting. He noted that the Strategic Spatial Energy Plan (SSEP), announced a year ago, discusses this and that some coordination is ongoing. There are different uses for the various types of energy generation; for example, while GW would be plugged into the grid, Small Modular Reactors can supply power to remote communities. AD requested a technical update on SZC at a future meeting.

7. A concern was raised that Government is not looking at the 'back end,' citing criticism from the academic community, alongside the statement that we are building infrastructure without looking at consequences.

Assurances were given that appropriately-sized GDFs are being constructed. Funded decommissioning plans are in place and Government is fully considering the cost of waste and different types of fuels. There is a commitment to fund the decommissioning policy both for GW and for smaller units; operators have to pay their full share of future decommissioning liabilities. The department needs to make sure there is a GDF that is fit for purpose as novel fuels might require novel storage and final disposal capabilities. AD requested a written response on the review of the decommissioning plan, which CH stated he was happy to provide.

## **2. Siting Consultation**

The Forum was updated on the publication of the Siting Consultation, the main purpose of which is to start the process of designating EN-7 for power stations expected to deploy post-2025. There are expected to be significant updates and the department welcomes responses to the consultation. A full presentation was given before the Forum moved to discussion.

Some concerns were raised about the content of the proposals contained in the consultation, especially the impression which is given that it moves towards a more developer-led approach and could result in reduction of strategic oversight as well as the uncertainty for communities which could be created by the removal of deadlines. There were further concerns raised about Brownfield sites and the impression that burden of proof now lies with communities who may not be resourced to oppose plans which they feel are wrong. A question was raised regarding what falls within scope of the clause concerning specific 'near to Defence activities.'

Brief feedback on some of the points was provided. It was clarified that changes outlined in the proposal have been introduced in order to align nuclear with other infrastructure processes. The Department for Housing, Levelling Up and Communities (DHLUC) is developing reforms to planning it is sensible and appropriate to undertake early engagement upfront, as these proposals encourage.

It was noted that the consultation document recognises former industrial and brownfield land, and that community engagement remains part of the process. The recognition of Defence sites hasn't changed. In particular, it was emphasised that this is a consultation process and that all views and feedback are welcomed through the formal channel, both on this and on the NPS, once it is put out for further consultation.

A specific question was asked regarding whether there is legal precedent for SoS DESNZ to overturn SoS DEFRA relating to HPC DCO changes. It was noted that the DCO process is currently undergoing changes so the Department is unable to comment, and it was agreed that a written response will be provided.

HPC item: A further question from AD which CH has undertaken to respond to in writing; this action was answer by AF on 6 February direct to KA.

A copy of the siting consultation slides was requested.

### 3. Sizewell C

SZC Team thanked the forum for advanced copy of the questions these were taking in order, **What are the comparators (counterfactuals?) to SZC given we know that modelling for 2050 is inadequate (interday storage, H2 price etc)? Have modellers looked at Oxford Smith School AND Royal Society re storage/costs?**

SZC team answer: We assess the impact of SZC on UK power system costs under both a high and low scenario for future electricity demand, representing different levels of electrification across the economy.

To compare to the policy scenario (building SZC), we have developed counterfactuals that are also net zero compliant but take the lowest cost combination of alternative (non-nuclear) low carbon technology. This is typically renewable forms of generation, supported by flexible sources of power, as an alternative to SZC as a firm source of power.

Our counterfactuals are informed by the published DESNZ Net Zero Reference Cases, including its data and assumptions on energy technologies and costs (e.g. for H2, for storage). The main difference is that we have not included future nuclear projects beyond SZB, HPC and SZC in the analysis, as we are assessing the impact of the next nuclear project rather than a wider nuclear programme. As such, future nuclear projects in the Reference Cases are replaced with the lowest cost mix of other low carbon technologies in both policy scenarios and counterfactuals.

Our existing power system model, the Dynamic Dispatch Model, does not account for long duration storage.

**We are confirming with analyst colleagues if these specific studies have been examined – we will revert ASAP to confirm.**

**Will NAO see the Full Business Case before final close?**

We would anticipate the NAO to review business cases etc following any Final Investment Decision.

All of our business cases have been and will be developed in line with Green Book guidance and subject to rigorous approvals from across Government.

As was argued during passage of the Nuclear Energy (Financing) Act, it is important that the Secretary of State – with their responsibility for designating projects to use the RAB model and for negotiating project licence modifications to implement RAB's – has the freedom and authority to negotiate the best deal for consumers and taxpayers.

We committed during the passage of legislation to publish a VfM assessment of RAB projects at the point of entry into a revenue collection contract.

**If the Govt took a majority stake, would the taxpayers' share of the project be subject to RAB, ie would the Govt earn a return from consumers during construction?**

The exact financing approach is still subject to ongoing commercial negotiations.

Shareholders in the project will obtain a financing return in line with the provisions of the RAB licence – HMG is considering how consumers and taxpayers can benefit from HMG's investment.

**Please explain why RAB would result in different outturn costs to the ECR/Vogtle which is expected to be \$170-180/MWh?**

Assessments of the US projects using the ECR model were made during development of wider RAB policy identified a number of areas which influenced our proposals for the RAB model.

The economic regulatory approach used in the United States was led by the utilities undertaking the projects, which had a number of implications for how costs were passed on to consumers in the event of overruns, and in establishing both suitable incentives for projects to be delivered to cost and schedule, and suitable disincentives for abandoning projects.

We also noted project-specific issues, including the maturity of design work, the experience of the project supply chain, and the structures in place to manage the projects. Similar conclusions were set out in a recent US Department of Energy [report](#) on Pathways to Commercial Liftoff: Advanced Nuclear

One of these key issues is that these projects are 'first of a kind' projects, which often encounter challenges and issues in these areas.

As a near-replica of HPC SZC will have certainty of:

- The project's design. HPC has had to make more than 7,000 design changes to the EPR design of Flamanville 3 to adapt it for the UK. SZC Co have had to make just 57 changes.
- the cost of components and equipment.
- how long it takes to install the kit.
- how to employ and manage a workforce of thousands during construction.

The benefits of replication are already being demonstrated between HPC reactors 1 and 2, where:

- Some of the biggest concrete pours are 45% quicker.
- Welding of some of the steel rings around the reactor have become quicker: down from 120 days to 20 days.
- 'Reworking' rates on welding are down 50%.
- First steel ring on U2 was built 25% more quickly than for U1.

AD followed up asking if the government was confident that SZC outputs will not match the US costs and the challenge to reduce it even with the challenges faced, looking at the analysis and looking at the capabilities. SZC advised that they were building on the supply chain for HPC.

**How is SZC reflected on HMG's balance sheet at present? How and when would the whole project be transferred? Assume this requires HMT approval, but would this need to wait for the Budget?**

SZC's balance sheet treatment has not been settled, given the ongoing commercial negotiations on the project.

AD asked the team about answering the point about the HMT and relationship with spring budget. JW sought clarity to the question to which AD provided: FBC requires HMT can you update how it relates to the spring budget. JW: HMT employees will look at these aspects and whether the project receives FBC. Have to review after the spring budget.

**Who will fund the cost of remedial works for damage inflicted in East Suffolk if the construction project is never completed - can DESNZ also confirm who will ensure such remedial works are undertaken?**

Under the DCO there is requirement to remediate the land in the event the project does not go ahead. This would need to be funded by the shareholders at the point of any exit.

**Who will be held responsible if the project fails - both legally and financially?**

All parties are working for the success of the company and the project. In the event the project does not go forward and the company was to be wound up it would be for the shareholders to meet any liabilities.

AD asked a follow up about the Government owning more of the project, AD wanted to understand the current standpoint how much is owned by HMG: JW didn't have an exact figure don't have the exact figure at that time.

**Chris Wilson (CW) asked: Failure to meet the resilience recommendations of the December 2023 NAO report:-**

**a) are DESNZ aware that the SZC developer has so far failed to demonstrate that the site can be kept safe for its full lifetime ie until all spent fuel has been removed from the site and the spent fuel store decommissioned? This is evidenced by the developer's flip-flopping on the final design of the sea defences submitted in support of their application to East Suffolk Council to discharge DCO Requirements 12 and 19. The developer has finally admitted that spent fuel will remain on site until (at least) 2160 whereas the DCO was approved on the basis that all spent fuel would be removed from site and the site fully decommissioned by 2140. The developer is now suggesting a new spent fuel strategy (a material change to the DCO), details of which are unknown.**

The project is developing a Funded Decommissioning Programme for approval by the Secretary of State, as required by the Energy Act 2008. We have convened the Nuclear Liabilities Financing Assurance Board to provide advice to SoS on these, and discussions between officials, the project team and the NLFAB are ongoing.

The timescales for the decommissioning of the plant and the removal of spent fuel will be set out in the project's Decommissioning and Waste Management Plan as part of the FDP – we cannot comment further at this time.

The purpose of the FDP is to ensure that new nuclear power station operators have secure funding arrangements in place to meet the full costs of decommissioning, waste management and the disposal of spent fuel. These plans and cost estimates would be regularly reviewed and updated as necessary over the lifetime of a power station. If the estimated costs increased, the operator would be expected to pay more into their fund to ensure it was sufficient to cover the liabilities.

**b) now the DCO has been triggered and construction of the power station can start, are DESNZ aware that this leaves the possibility that major works will be undertaken**

**before the ONR have confirmed (if they ever can) they are satisfied that the site can be kept safe for its full lifetime?**

The ONR gave an update on the SZC NSL application in July 2022. This concluded that “[SZC’s] application has met almost all the regulatory requirements set out in regulatory guidance” and set out details of two conditions that have to be met. They also noted that “When those matters are resolved, we would carry out a proportionate reassessment of the application, focused on the two outstanding matters and any other relevant licensing issues that emerge during the intervening period.”

If granted, ONR would use the powers within the licence to require the licensee to request our permission for starting nuclear safety related construction.

The NSL is one of several site-specific approvals required for the project – others include the DCO granted in 2022, and relevant permits from the Environment Agency. Under the DCO there is requirement to remediate the land in the event the project does not go ahead. This would need to be funded by the shareholders at the point of any exit.

CW requested a copy of the answer to questions in writing? He wanted to highlight that the point is that now the government has triggered DCO, major works are happening, if ONR don’t give NSL substantial work for a project that fails.

**c) Sizewell C’s potable water requirement, essential for its 60 years of operation, is relying on an as yet unproven draft Water Resources Management Plan which is itself reliant on a number of proposals including domestic consumers reducing their consumption to 110 litres per day. What assurances can DESNZ give that, in times of drought and water shortages, the demands for Sizewell C will not take priority over the needs of the residents/farmers and other businesses in Suffolk? (Sizewell C’s average daily potable water demand is 2.2 million litres, the equivalent of the future daily consumption of 20,000 residents).**

We understand that the question of the project’s water supply is subject to continued legal action. We cannot on this matter.

**Pete: Is DESNZ aware that it is entirely likely that, should the 5 – 8,000 SZC construction workforce be on the Sizewell site at the same time as the 900 SZB workforce, the 400 SZA workforce, a possible additional 1500 contractors undertaking a SZB outage programme, not to mention the growth of residents occupying the new housing developments in Leiston, the emergency safety concentration limit of 5,000 people in a square kilometre of the detailed emergency planning zone (DEPZ) could be exceeded?’**

The project’s workforce plans are subject to ongoing development and due diligence. We cannot comment on this matter directly but would anticipate that the project (in conjunction with EDF and NDA teams at Sizewell B and Sizewell A respectively, as well as the relevant regulators and local authorities, would ensure that all such requirements would be met throughout the construction period.

MT Raised a point which was confirmed at Stakeholder meeting, EDF commitment is less than 20% of overall cost of this project; subject to HQ agreeing to go ahead with SZC. Continuing the performance with SZB, he wanted to emphasise that renewables work in this country. He continued that it’s almost impossible for ONR to grant licence unless they know the final owners of the project, especially pertaining to the spent fuel/decommissioning element, he doesn’t understand how the government will pass that hurdle. The SZC team stated that development is with the current shareholdings, dialogue/process are ongoing to determine ONR NSL. The team will keep this forum informed as process continues.



PC reiterated that it returned to the funded decommissioning point -spent fuel strategy would need to go ONR and EA on points around coastal protection and changing DCO conditions. ML offered to take that question to FTP project who are working with regulators and will be able to provide some definition on that.

Sought to clarify with a point with KA regarding her question and its implications that its for DEFRA to answer. She believes DESNZ are in control of the consultation and there is no input from DEFRA. Acoustic Fish Deterrent (AFD) has to be used. CH advised that we will answer your questions but we will engage with DEFRA and also flagging as its EA issue. The written answer was issued as per the above.

AD asked about HPC where the French media where they are reporting about plugging the financing gap. CH stated that we will not comment on those items in the French media.

TJ sought to ask a question on AGRs. EDF are planning to extend the fleet including Torness, the locality around him are planning celebration to close in March 2028 and would like to know the rationale/response to this announcement including the justification is for this. He believes that we don't need nuclear and have renewables therefore he is not clear on the extension other than subsidising French taxpayer and EDF need the income. CH responded that EDF have announced an ambition but as with all nuclear power sites this will be subject to its ongoing processes for safety and work with ONR plus the market conditions. Government welcomes it.

CH closed the meeting and stated that we will look to sequence these throughout the year at appropriate times; AD stated that a meeting with Minister was now overdue.