BEIS Nuclear NGO Forum Minutes Monday 14th March 2022 15:15 – 17:00 Microsoft Teams

1. Introduction - Chris Heffer and Alison Downes

Co-Chairs of the Forum, Chris Heffer (CH; Director, Nuclear Cluster, BEIS) and Alison Downes (AD; Stop Sizewell C) opened the meeting and welcomed attendees to the first NGO Forum of the year.

CH offered his apology on behalf of Minister Greg Hands who was unable to attend. CH added that the Minister will try to attend the next meeting and that he had expressed interest in attending it in person, potentially in the summer. CH explained the possibility of looking into arranging another meeting with the minister at an appropriate time, so members can have their questions answered.

CH raised the work being undertaken by the department on the humanitarian effort in Ukraine and welcomed questions. CH highlighted issues with energy resilience and welcomed wider views on energy resilience and questions.

AD expressed disappointment at the minister's absence and requested that questions and feelings are reported back to the minister.

AD added that whilst she was aware of the crises, decisions about energy security are being made rapidly, and Forum members have urgent things to say. AD hoped that the BEIS policy update would cover the Energy Strategy expected next week.

Andy Blowers (AB, BAANG) echoed disappointment that the Minister was unable to attend and explained that it gives the impression that NGO's are low on the list of priorities. He added whether another Minister could attend in Minister Hands absence.

CH ran through the actions from the last meeting. He explained that previous actions regarding GDF may require a separate meeting with officials. AD confirmed that she has been liaising with officials directly on queries related to calculations of figures in the Nuclear Energy (Financing) Bill.

2. BEIS policy update - Florian Wagner, Vivienne Daly and Declan Burke

Chaired by CH, BEIS Officials gave brief updates on key BEIS policy areas.

CH Introduced Florian Wagner (FW, BEIS) who gave an update on the Nuclear Roadmap. He confirmed that BEIS announced that they will publish a roadmap as part of Net Zero Strategy, that was published at the end of 2021. FW explained that it will be published this year and will outline what steps are needed to support further nuclear, alongside the Future Nuclear Enabling Fund (FNEF).

AD asked whether the roadmap would include strategic siting issues. FW advised that he cannot comment on the specific details of the roadmap, as it is not yet fully defined.

Vivienne Daly (VD, BEIS) gave an update on the Future Nuclear Enabling Fund. She explained that the Fund was announced in the Net Zero Strategy and was assigned £120m from the 2021 Spending Review. VD clarified that the aim of the FNEF is to address barriers to entry into market and inform investment decisions in the next parliament. She added that BEIS were hoping to have published more about how the FNEF will operate and the design principles, but global events have delayed this. VD confirmed that BEIS will publish more in due course.

Declan Burke (DB, Director, Nuclear Cluster, BEIS) provided an update on The Regulated Asset Base Model (RAB) Legislation. He explained that legislation is progressing through parliament and is currently in the House of Lords. (Since then the Nuclear Financing Bill received royal assent).

DB Commented that there is a lot of work going on around the energy position more broadly with significant attention on energy resilience, which the department is taking very seriously. He added that BEIS are thinking about decarbonisation, but also resilience and having the lowest possible cost to consumers. DB said that he envisions nuclear having an important role in the resilience of the energy system.

CH seconded Declan's points on energy resilience and the focus on supporting activities in Ukraine across wider BEIS and the Nuclear Cluster.

Neil Crumpton (NC, PAWB) highlighted that he covers energy resilience in his papers and directed members to refer to them. NC added that it was appropriate to emphasise that the west is dependent on Russia for Uranium imports which would imply energy insecurity. NC asked whether HMG was considering including Uranium in the next round of sanctions, similarity to the oil and gas sanctions.

CH advised that it is possible to have sanctions on Uranium, but this has not been the focus yet. AD clarified that their understanding is that reliance on Russia for enrichment and uranium is minimal.

AD asked for more information on EDF's relationship with Rosatom, noting that EDF Russia had changed their website indicating a lack of transparency over their relationship. AD asked for an update on the treasury consultation about the taxonomy of nuclear energy which was due earlier this year and hasn't been published.

In response to AD questions. DB explained that he was not aware of any specific links, or EDF presence in Russia. This was echoed by Chris Bowbrick (CB, Deputy Director, Nuclear Cluster, BEIS), who added that they can seek clarification on this. DB stated that there was no update on timing for the taxonomy consultation at this point.

Pete Wilkinson (PW, TASC) asked, in terms of the FNEF, how can Government commit public funds to nuclear facilities that go through a weak planning and GDA process. PW stated that there is advocacy for new nuclear but the outcome of the planning process for the Sizewell C project is yet to be determined. PW asked whether there is already certainty that the Sizewell C project is a foregone conclusion.

DB responded that planning issues are kept separate to policy. The planning team sit in another directorate and therefore he cannot comment on their behalf. DB added that this arrangement is not unusual in low carbon technology.

lan Ralls (IR, Friends of the Earth) said that he heard that the UK is buying Russian Uranium and exporting enriched Uranium from Springfields and asked if this is true and can there be some elaboration?

CH clarified that the UK can not export enriched Uranium but there may be potential of export from Springfields, as some material is not UK material. CH actioned for this question to be followed up after the meeting.

Andy Blowers (AB, BAANG) made the following points:

- The attack on Chernobyl and Zaporizhzhia nuclear sites demonstrates the danger of nuclear plants from, for example, warfare and terrorism, and is a sign to Ministers that nuclear should not be pursued.
- Can BEIS confirm/deny the current status with the Bradwell plant noting the rumours that it is about to "die"?
- Whether the idea of Small Modular Reactors (SMRs) being small can be removed from the discussion, as clusters of them would amount to a large plant.
- It is untrue that there are nuclear sites ready to go and when will there be a siting assessment for the <1 GW plants?

In response to AB, DB reiterated that the planning team sit in another directorate and is separate to policy issues. CB explained that Bradwell is run by CGN and EDF, and so the decision to progress lies on them. BEIS will consider proposals if they bring them forward. Regarding siting, CB confirmed that there had been a review of EN-6, and it was concluded that EN-6 will not be amended as there are no changes to circumstances. CB added that the new policy statement is proposed and will be developed and consulted on in due course.

Varrie Blowers (VB, BAANG) described hearing the first reports on 4th March of the attack at the Zaporizhzhia nuclear power plant in Ukraine with great concern. VB explained that Downing Street had said that this could directly threaten Europe and is further evidence to focus on renewables rather than nuclear.

Katrina McLeay (KM, Deputy Director, Nuclear Cluster, BEIS) summarised that BEIS are working closely with IAEA and working hard to provide expertise and support to Ukraine. She noted that BEIS watched the events on 4th March with the same concern and are working with UK regulator to make sure the UK has robust arrangements in place to make sure we are safe from external threats. KM emphasised that ONR would not allow nuclear installations to be built or operated if they judged they are not safe or secure to do so. KM added that BEIS are also in contact with the Ukrainian regulator, who continues to report incidents through IAEA.

3. Sizewell C (SZC) – Declan Burke and BEIS Officials

AD clarified that although this agenda item is about SZC, she would welcome questions from other campaigns.

Paul Collins (PC, Stop Sizewell C) gave a brief overview of the Sizewell C project. He explained that the Development Consent Order (DCO) is not at an appropriate level for submission and that it had taken 11 years for Sizewell C to reach its current point. PC added that although the Applicant sees this as a replica of Hinkley Point C, SZC is one of the least sustainable locations. PC added that 22 change requests submitted during applications has demonstrated inadequacy and the application should not have been accepted in the first place. PC outlined other key issues including missing coastal defence plans, delayed critical assessments, siting and site suitability. Furthermore, highlighted that EDF's 6 other EPRs are over schedule and budget. PC explained concern that there are 8 other energy projects being developed in the SZC area, and highlighted SZC as an unsuitable project for the UK and for Suffolk. PC explained that the A pplicant has presided over six other developments that have overrun cost and time schedules, and referred to the Taishan reactor unit 1 that had to be taken off line and is still under investigation.

PC expressed concerns with the Regulated Asset Base (RAB) model due to the transfer of risk to the consumer under a RAB, and the cumulative impact of eight other projects which would likely be developed in the period of Sizewell C.

i. East Suffolk communities were deeply shocked that HMG has given £100 million to Sizewell C to further the project's development and "ready it for investment" when it does not even have planning consent. Last week the Financial Times reported HMG is considering a 20% stake. Invitations to the Secretary of State to speak to affected communities have been refused on the grounds that it would compromise his quasi-judicial role in deciding whether Sizewell C would get planning consent. Yet he visited at the end of January to exclusively talk to EDF and praise the project to local media. The faith of local people in due process is in tatters. Please explain how the above do not compromise the SoS's quasi-judicial role and constitute bias or pre-determination? (AD, Stop Sizewell C)

DB thanked those involved in his recent visit to SZC. He went on to explain that decisions in Government on planning proposals for nuclear projects are kept separate from wider nuclear policy, and Minister Rowley deals with the planning application. DB further explained that his role is to look at how the Sizewell C project might look but highlighted that this is completely divorced from the planning aspect. DB stated that he would not comment on media and added that there is no final decision about what the project might look like, and discussions that are taking place are commercially sensitive.

CH clarified that Minister Rowley makes the DCO decision on behalf of the Secretary of State.

ii. EDF is only now applying to East Suffolk Council for planning permission to conduct soil mixing and ground anchor trials, work that is absolutely critical to determining if the Sizewell C site can be prevented from collapsing during construction. Not only is it astonishing that these trials have not yet been done,

the results won't be known for at least six months. How could the Secretary of State even consider approving Sizewell C's planning application without this vital information? (Paul Collins, Stop Sizewell C).

PC referred to the Nuclear Energy (Financing) Bill in his question, which states that a project must be sufficiently advanced.

DB explained that the department can't comment on cannot comment on specific matters regarding the proposal. DB reassured members that relevant matters will be considered, highlighting the technical, financial and engineering expertise involved in the process and the use of external consultants such as ARUP that look at the technical details.

AD referred to recent discussions on the Nuclear Energy (Financing) Bill in the House of Lords and asked when this more detailed criteria influencing the decision will be published. AD cited Lord Callanan as saying that the criteria had not been published in advance as it was thought there would be outcry and had wanted to hear thoughts. AD added that, so far, timing for publication had been given as "in due course" and that it is hard to assess a project for designation when there is still information missing.

DB clarified that designation is different to a final investment decision.

Erin Coghlan (EC, BEIS) explained that the commitment is still to publish in due course, clarifying that Lord Callanan had meant that Government did not want to pre-empt the outcome of the passage of the bill. EC added that the statement is sequential and will come out ahead of the project being designated, and that a project's designation does not represent a decision to enter construction or a final investment decision – which would be subject to due diligence across Government.

iii. The cause of fuel failure at Taishan has yet to be determined. At a minimum it has been intimated by ASN and ONR that more robust fuel assemblies could be required, which seems to acknowledge that the design of the EPR accelerates the degradation of existing assemblies. How can HMG consider building more EPRs with such serious outstanding questions? (Christopher Wilson, TASC)

DB explained that BEIS are working with the ONR and other regulatory bodies. DB assured the forum that appropriate due diligence is being taken and fully understand the issue in Taishan for this project. DB recognised that the problems at Taishan need to be fully understood before an investment decision. DB highlighted that Olkiluoto 3 has reached first criticality.

Christopher Wilson (CW, TASC) added that it will not be known for a few years whether Olkiluoto will work sufficiently.

iv. Soil mixing trials are a clear example of where the developer hasn't divulged the problem and added that the issue should have been resolved before the site was nominated. There are issues in Sizewell that aren't even known to national experts, but there is significant local knowledge surrounding the geology of the underlying strata. The technical difficulties of constructing the site are huge and it is incomprehensible that the developer has been allowed to not address the issue. How can BEIS decide on the project without the data?

DB reiterated that planning decisions and issues fall to another directorate. DB added that Sizewell C and EDF team have been liaising with the council.

v. During an Ipswich business lunch, the Secretary of State told us and business leaders "EDF have made their offer. We are not happy with all of it". Which parts of EDF's offer are BEIS ministers not happy with? (AD on behalf of Pete Wilkinson, TASC).

DB explained that SZC is a very large and complex project, so would be unusual to be immediately happy with the offer. The government are in lengthy confidential commercial negotiations and cannot expand. DB added that HMG care about several factors including what BEIS wanted for consumers, which is the best deal possible at low cost, energy security, and low carbon generation, and Ministers want to get the best deal possible for the UK.

PW echoed CW concerns over Taishan and added that it is ridiculous that there is a design fault. Added that the Geological Disposal Facility (GDF) programme is highly dangerous to communities waiting for a suitable repository, unethical and potentially financially ruinous. PW also highlighted the risk GDF's pose in times of conflict. PW stressed the need for ministers to say whether decisions around nuclear have been made or not and that they should prioritise renewables.

CH responded to PW's comments about GDF to say that there are 3 or 4 potential GDF sites in the UK.

AD had suggested that Rod Donnington- Smith (RDS, Cumbria Trust) ask his questions on GDF to officials.

- vi. The current process being followed in West Cumbria in the search for a possible site for locating a GDF is undemocratic. Residents in Allerdale were informed that "The Future is in your hands", which is blatantly untrue. Can the Minister please confirm that the UK is a signatory to the Aarhus Convention?
- vii. The evaluation of the Managing Radioactive Waste Safely Partnership in West Cumbria that ended in 2013 said: 'any future Partnership must make efforts to carry out dialogue with NGOs and engage them in the process. There may be common ground that can be established, there may be not, but exclusion or ignoring NGOs and dissenting voices is just not an option' Government as in this Forum is also willing to engage with NGOs. Why therefore have all the partnerships established so far excluded NGOs?

The above two questions were taken together.

Umran Nazir (UN, Deputy Director, Nuclear Cluster, BEIS) explained that a GDF is needed even if no new power stations are built in rider to deal with existing legacy issues and added that GDFs are scalable subject to the specific geology a GDF is constructed in and so there is no inherent design issue with GDFsand no overarching technical blocker to make it scalable.

UN referred to the 2018 Energy White Paper which sets out the process for siting including the need to gain community consent and highlighted that the assumption set

out in that document was that the GDF would need to be able to cope with waste arising from 16 GW of new nuclear power capacity. UN highlighted that siting for GDF is in very early stages and local NGOs will be included in future discussions.

PW responded that scientific issues were put to RWM several years ago and have not been demonstrably dealt with.

UN stated that, as there is no design or location for a GDF yet, and so detailed site specific technical questions cannot be answered as yet. UN clarified that the UK are a signatory to the AARHUS Convention. UN explained that the siting process for a GDF has barely begun, and that the current siting policy includes a requirement for local community support before proceeding.

PW argued that new waste presents a new set of waste streams and that a GDF will not be able to cope with these.

UN concluded that a GDF can cope with new nuclear waste and that a GDF is needed in any case to deal with legacy waste.

CW said that GDF is an excuse to make more waste, and that we should be concerned about developing one. Raised that there is no public consultation on the fact that waste will be created at Sizewell C.

UN reiterated that the GDF is needed to deal with existing legacy issues and stated that there will be a test of public support before a final siting decision for a GDF. UN further explained that it will be for the community to ultimately decide, and whether or not relevant NGOs will be included as part of the said 'community' is yet to be stipulated as it is a local decision. UN added that the policy from 2018 was consulted on.

UN explained that until there is a site for a GDF, any claim that it would be impossible to deal with a particular type or quantum of waste is unfounded.

AB stated that new build waste will be in storage on site, referred to the adaptive management approach.

AD conscious of time suggested coming back to GDF after the other agenda items if there is time.

4.NGO Modelling Presentation – Neil Crumpton & Ben O'Driscoll

AD introduced Neil Crumpton, who had written papers critiquing the Dynamic Dispatch Model (DDM) that BEIS is using to identify economic and system (carbon) intensity comparisons between 2050 electricity sector scenarios.

NC explained that he had written part 1 after hearing the Secretary of State's statement that nuclear is critical for the future of the UK.

NC called for Value for Money in the modelling to be published and asked why the Minister described nuclear as critical and who advises the Minister on this.

NC described part 2 of his report as more detailed and intended for BEIS officials to consider. NC explained that he had suggested some ways forward for the DDM and that cost effectiveness of green hydrogen vs blue hydrogen is worthy of modelling, as well as the use of curtailed electricity, and the use of air capture.

NC explained that the latest intensity of offshore wind farms is considerably lower than BEIS had used, which changes a lot of the modelling, and forms a substantial part of his paper.

NC explained that the model is sensitive to construction start times, and that a delay completely changes the carbon intensity. NC added that the cost and carbon intensity of nuclear and offshore wind are close in most scenarios. NC stated that models should be upgraded and called for wider consideration of toxic waste and proliferation.

NC concluded by asking for BEIS comments on the paper.

CH introduced Ben O'Driscoll (BO, BEIS) to respond to NC. He explained that BEIS do run a large number of scenarios (around 3500), all looking at a range of technology options. Having nuclear in scenarios generally allows the UK to keep system costs down.

He explained that there are lots of assumptions from stakeholders in BEIS to provide energy estimates. Consultants and other stakeholders such as the Climate Change Committee (the CCC), the Low Carbon Contracts Company (the LCCC), HMT, Department for Transport (DfT), Department for Environment, Food and Rural Affairs (DEFRA), and the National Grid provide information.

BO explained that generation and capacity mixes are for indicative scenarios, and they keep a broad overview to provide balanced advice to ministers. BO added that Bioenergy with Carbon Capture, Utilisation and Storage (BECCS) in the model generates negative emissions, but these are not included in the power sector emissions; negative emissions are accounted for elsewhere to offset all sectors.

BO advised that the DDM is a major model although not the sole model used by the Department. He added that there may have been a misinterpretation by NC, and that the negative emissions do not count in the model (eg from CCUS).

NC stated that he would like to maintain contact with BO, and asked who is advising Ministers that nuclear is an "absolute need", asks if given all considerations can the tone be moderated, as they are misinforming the public.

BO responded that the model is used to build a credible view of the system and pass that view onto policy makers. There are a lot of steps and quality assurance to make sure the modelling is correct. He stated that his team runs analysis and uses reference cases to provide advice on specific projects. There is broad engagement across the department that is used to advise upwards to highlight key risks and opportunities. In addition, when briefing ministers BEIS try to avoid hard hitting statements. The advice is usually fairly well caveated, to avoid making a hard statement as the sector is very uncertain especially in the far future (up to 2050). BO explained that key risks, opportunities and system costs are highlighted.

Mike Taylor (MT, TASC) explained how he was not entirely sure how across government the issues are being looked at from the point of view of the predictions on climate change, problems that were approaching on use of farmland and obviously the question of how the advances in technology are accommodated. Asked if someone could reassure us how across the government, they address the issues of energy security and resilience in terms of overall policy? Ukraine has flagged many energy issues.

CH responded to explain that each department has its own remit, and outlined the role of the Cabinet Office in looking across government.

BO added that BEIS are actively looking at new technologies, for example scenarios that include hydrogen, and have commissioned research outside of BEIS. BO explained that BEIS will carry out research and analysis in the power sector and will aim to capture changes in technology or demand in the DDM.

NC highlighted that BO's conclusions from the model to Ministers is full of caveats and Ministers are full of assertions. Concluded that Ministers should be less assertive in making their remarks.

CH suggested NC meet with modelling team to discuss matters detailed in his paper.

5.Summary and Closing Remarks – Chris Heffer and Alison Downes

CH reassured NGO members that he had heard all concerns and points raised in the meeting. CH advised that the Department will look to arrange a 30 min session with the Minister and urged NGO members to think about future topics for consequent meetings. CH thanked all members for their questions and asked AD whether there was anything further she would like to raise.

AD explained that she had an interesting discussion with her colleagues at Greenpeace on energy strategy. The impression that they get is that big decisions are being made very quickly and this is reflected in the current media. Stated that she understood that as officials you are no in a position to share information that isn't in the public domain but this forum does not give us access to information that is not published. Asked whether an increased commitment to giga watt projects beyond the £100 million Combined Option and £1.7bn commitment in the 2021 Spending Review was to be expected.

Declan Burke (DB) responded to say that that BEIS cannot go into detail on things that have not been announced at this point but in terms of the energy system, DB explained that the foundation of the energy system will be renewables, and BEIS think that nuclear plays a part in this. DB added that this is a fluid situation and energy resilience is very important.

AD stated that, given the incredibly long lead time to build Sizewell C and Wylfa, there is a disconnect between the current energy crisis and the need for immediate energy security. AD added that it has already taken ~11 years to get to this point at SZC and is concerned that a big announcement on SZC will be coming shortly which feels like a knee jerk reaction.

PC asked, in regard to the £100 million injected into the Sizewell C project with potential for use over the land for other low carbon projects, what the Government expect the land can be used for, given that the Sizewell C land is not a good site.

CH summarised the need for energy security, which renewables will need to be built for but clarified that there is an absolute role for nuclear. CH explained that alongside modelling, politics and policy have a role.

Actions

• Follow up about obtaining more clarity of EDF's relationship with Rosatom

 Follow up on lan Ralls Question, The UK is buying Russian Uranium and exporting enriched Uranium from Springfields, is this true and can there be some elaboration.

Answer - Uranium for UK reactor fuel is sourced by EDF. Per EDF's website, natural uranium is procured from a variety of mining operators in a number of countries, including Niger, Kazakhstan, Canada and Australia (Nuclear fuel cycle). As well as natural uranium, some reprocessed uranium is used in fuel for Sizewell B. This feedstock material is stored in the UK by the NDA at Sellafield and previously some quantities have been sent to Russia for conversion. Under current sanctions all export licences for nuclear material from the UK to Russia are suspended. No enriched uranium is sent from the UK to Russia

- Follow up on Richard Bramhall Question, *Please could you ask for a written answer on which departments if any are responsible for receiving and considering applications for review of the justification of practices that involve exposing people to ionising radiation?*
- Chris Heffer to feedback NGO concerns to Minister
- Follow up on Mike Taylor's Question, EDF are now predicting £22 billion more debt by end of financial year and prospect of splitting off French operations from world. Macron may nationalise EDF even further. Are BEIS monitoring this and considering the possibility of having to take on EDFs nuclear liabilities in UK.
- Follow up on Alison's question, The way it looks to me is that either the Minister has sole responsibility for the DCO decision, in which case there is no reason the SoS could not meet us (see below), or the SoS is involved in the decision (which is much more plausible), in which case doesn't our original point - i.e. that visiting EDF, giving them £100m and considering becoming a partner all undermine his quasi judicial role - stand?

Answer - In accordance with propriety guidance, no-one in the Department, neither Ministers nor officials, should be discussing the development consent application with anyone outside the Department. This will be why the SoS's office have declined your request for the SoS to visit Suffolk/meet with you. The requirement not to discuss live planning applications with third parties is set out in our propriety guidance: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/48259/3908-propriety-guidance-develop-consents.pdf

As set out in the response in the meeting, the Secretary of State's visit to Suffolk at the end of January to talk with EDF was not related to the application for development consent, and concerned matters entirely separate to the planning process.

- NC meet with modelling team to discuss matters detailed in his paper.
- Arrange a 30-minute meeting with Minister Greg Hands
 NGO Members met with Minister Hands on May 9th 2022.