



NGO Forum Minutes
Wednesday 26th June 2019
Council Room, Institute of Mechanical Engineers,
St James Park, London
13:00 – 15:45

1 Introductions

Co-Chairs of the Forum Stephen Speed (SS; Director, Nuclear, BEIS) and Professor Andrew Blowers (AB; Blackwater Against New Nuclear Group) opened the meeting. SS welcomed new members, Alison Downes and Phil Collins from Theberton and Eastbridge Action Group on Sizewell (TEAGS) to the Forum.

SS noted apologies from the Business and Energy Minister (Andrew Stephenson) and highlighted that BEIS recognise the importance of future Ministerial attendance.

SS informed the Forum that there no outstanding actions from the previous Forum. Members were concerned that they were not informed when minutes for the previous Forum were published.

BEIS ACTION: Secretariat to circulate the minutes of the previous Forum to the membership after the meeting.

2 BEIS Update

SS provided an update to the Forum on BEIS matters:

- **Net Zero:**
 - Government commitment to net-zero carbon emissions by 2050
 - Important for future discussions on clean energy and the role of nuclear moving forward
- **New Nuclear:**
 - Major milestone passed at Hinkley Point C known as J-0 – to signal the completion of concrete pouring for Unit 1.
 - HMG continue to work on the National Policy Statement for designated sites.
- **Regulated Asset Base (RAB):**
 - HMG continue to review alternative funding models for future new nuclear projects including a 'Regulated Asset Base' (RAB) model.
 - In 2016 the RAB model was applied for the first time to a single asset, construction stage project – the £4.2bn Thames Tideway Tunnel, being built under a 25km stretch of the Thames in central London.
 - Continue to understand if a similar approach could be used for nuclear.
- **Energy White Paper**



- The Secretary of State for BEIS (Greg Clark) gave a speech in December 2018 which referenced an Energy White Paper to be published in Summer 2019.

- **Joint Fact-Finding approach**

Umran Nazir (UN; Deputy Director for Decommissioning) informed the Forum that government's longstanding position on nuclear safety was to take decisions using evidence-based advice. The Committee on Medical Aspects of Radiation in the Environment (COMARE) with Public Health England was created for the purpose of providing the government with advice on ionising and non-ionising radiation on human health.

UN noted that a meeting with Richard Bramhall (RB) and Pete Wilkinson (PW) had taken place in November 2018. This discussed how a joint fact finding (JFF) approach on low-level radiation risks could work; both members suggested at this meeting that NGOs and BEIS could discuss several areas of concern to come to an understanding.

UN noted that BEIS have discussed the approach internally and have reached the conclusion that government are not the appropriate party for a JFF and if this proposal was taken forward, it could undermine or interfere with the role of the COMARE who were the appointed independent expert panel established by the government and government cannot set up a competing group.

Instead, BEIS could help NGOs with defining the areas of concern within low level radiation and pass those concerns on to COMARE and Public Health England.

This item was closed with BEIS highlighting that they would be content to assist the NGOs if they look to present their case to the relevant public bodies.

BEIS Action: Continue discussions on JFF outside of the Forum between UN and RB.

3 Energy Scenarios

AB informed the Forum that Neil Crumpton (NC) had been exploring energy scenarios for many years and the paper received by the membership was the 17th or 18th iteration. He noted the hard work and effort that has been put in by Neil.

NC introduced the item by reflecting on the meeting with BEIS analysts and policy in April 2019. He noted that during the meeting he critiqued the Hinkley assessment and that his paper suggested that an assessment should consist of values that can be costed and clearly itemised. In addition, the paper focuses on balancing costs and backup capacity. He also noted that the paper was submitted to a BEIS inquiry and was brought into the Forum to bring the work to a wider audience.



NC went on to note that as nuclear projects are worth £10s of billions, Ministers should obtain VfM assessments from an independent group and that any criticism should be clearly evaluated. David Lowry (DL) highlighted the importance of independent critique, suggesting that contracted consultants tend to only reinforce rather than challenge government.

NC put forward a number of recommendations from his paper:

1. BEIS radically revises its VfM counterfactual cost assessment methodology/model in ways which address the concerns expressed in this evidence and in related BEIS-NGO Forum discussion papers - including transparently identifying and itemizing all the significant cost components (including network charges, transmission links, back-up capacity, balancing, post-contract consumer benefits, etc)
2. A revised VfM assessment methodology is made available for consultation (political, National Audit Office, public) and refinement before consideration of funding packages for any further new-build nuclear projects
3. The counterfactual scenarios (technology mixes, related costs, etc) and estimated Strike Prices for intended input into the model, for a proposed project, are made available for political and public scrutiny (consultation) and revision before VfM assessments are carried out
4. In the interests of due diligence, public scrutiny, and informed debate, that BEIS publishes both the VfM assessment and the energy Secretary's proposed decision, for a period of 3 months, before Secretary of State sign-off, or not, on funding contracts for new-build nuclear projects

Mike Taylor (MT) informed the Forum of the carbon footprint of new nuclear developments and suggested that these are not taken into account. Ian Ralls (IR) noted that the carbon footprint increases as the uranium metal extracted lessens in quality.

A BEIS attendee from the April meeting with NC also acknowledged that a useful discussion was had and confirmed that HMG's role is to continue to decarbonise the UK. The attendee noted that internal analysis has taken account of the report. Co-Chair Stephen Speed noted that the issues presented are highly complex and are part of the process of knowledge formation.

BEIS action: BEIS to respond to Neil Crumpton

4 Radioactive Waste Management



Department for
Business, Energy
& Industrial Strategy

Ann McCall, Siting and Engagement Director, RWM (Radioactive Waste Management) provided an update of the meeting held by RWM and NDA with the Forum which took place in May. This covered developments on decommissioning and geological disposal.

Key points from Ann's presentation:

- RWM ensure that waste is packaged in a way that is suitable for disposal in a GDF;
- RWM works with a world-class scientific community, both in the UK and internationally;
- Three things are required for a GDF: packaging compatibility, a suitable site with a willing community, a design & safety case;
- A GDF is a Nationally Significant Infrastructure Project, but it also aligns with the Industrial Strategy and Nuclear Sector Deal, providing jobs, skills, and growth;
- A willing community - the government consultations and resulting policy has been discussing what a community is and how to work with it, respecting community consent;
- Policies on *Working with Communities* (with accompanying guidance from RWM), were issued for England by BEIS in December and for Wales by the Welsh Government in January;
- Consultations have been carried out in England and Wales on how RWM will evaluate sites coming forward;
- The National Geological Screening exercise involved RWM working with the British Geological Survey to provide authoritative information about the geology of the UK that can be used in discussions with communities and help RWM focus its engagement activities.
- Over the coming months, RWM is leading a campaign to raise awareness and engage stakeholders, including with this forum;
- Ann notes that RWM will engage with groups who want to get involved, and ensure their opinions are considered when in the process of finding a suitable site.

Andy Blowers thanked the RWM for being active in engaging with the NGOs. Several questions were raised by the membership which Ann will respond to in due course:

- Which would take priority, a willing community or the geology?
- Does a "willing community" include communities on the transport route?
- What is the current state of play with the local communities, like in Northern Ireland, who have already voted against building?
- Why were both consultation events in Wales cancelled?



- Are you aware that the only operating GDF in the world, in New Mexico, had to close because of a leakage of nuclear waste?
- The need for deep disposal is obvious because waste isn't safe near the surface.
- Sizewell B has the only drystore in the country. How will casks will be moved from the site?
- How will communities holding waste be compensated in the short-term?
- At Hinkley Point C, where will high-level waste be stored? Will it go in the cooling ponds or into a drystore?

BEIS Action: Ann McCall to provide a note to the Forum with responses to the questions asked by members.

5 Emergency Planning

Sean Morris (SM) opened the item noting that a useful discussion was had with BEIS in November 2018. However, since then the member felt legislation has been passed with little consultation. The member noted the difference in awareness based on distance; communities in the vicinity of nuclear plants are aware of the risks but the communities in the wider area are not.

There was concern that in an emergency, misinformation could lead to mass panic and as a result emergency planning should be increased in geographical scope - preparation is always kept to very small communities. There should also be consideration of information that should be provided for the public.

Graham Webber (GW; Deputy Director for Nuclear Resilience & Safety) thanked SM for the paper and his letter and reiterated the importance of NGOs to feed into any issues of concern surrounding emergency planning.

GW reminded members that the Radiation Emergency Preparedness and Public Information Regulations (REPPPIR) and Carriage of Dangerous Goods Regulations came into law in April and May and both have 12-month implementation periods. Learning from Fukushima has informed the legislation i.e. planning for beyond design-basis accidents and creating a stronger legal basis for planning. In addition, if operators are uncertain of the severity of a worst-case incident, they will now have to assume a 10% release. Stable iodine regulations have also changed to increase access for emergency services staff, for example. Training will also be given to operators about the consequences of radiation, and the definition of radiation worker has been expanded.



GW highlighted that the key changes are planning zones. The regulations bring in outline planning zones for low likelihood/high impact accidents. Detailed emergency planning zones remain around each nuclear site.

BEIS noted that radiological incidents can happen in councils that have no experience with nuclear emergencies (such as after a transport or international incident) and as a result the Nuclear Emergency Response Framework (NERF) will look to explore this.

GW noted that NGOs should have a role in our upcoming gap analysis. GW hopes to hold an event in the autumn which would provide an opportunity to explore further details from SM's paper.

Comments raised in response from members included:

- DL noted that authorities that have no nuclear are not prepared in an emergency situation and reiterated the importance of better understanding the effect of a release during radiological transport.
- Tor Justad asked if full account was taken to cutbacks to all local authorities? As emergency planning officers often don't exist, particularly in remote locations such as the Highlands.
- Mike Taylor: noted that an EPZ of 3 to 5 km would be successful as it would include neighbouring villages that aren't included at the moment.
- Andy Blowers: noted that half a million people live within 30 km of Bradwell and getting these people into neighbouring counties would be difficult. The idea of planning is to be realistic.

GW in conclusion noted that it would be hard to implement a plan to the letter. Planning for a worst-case scenario is challenging, however preparations and learning must be taken from Chernobyl and Fukushima. The new transport regulations include advice for local authorities. GW informed the Forum of the importance to highlight to BEIS and the regulator if there are concerns that your local authority isn't prepared to a high level.

6. Siting

AB opened the item suggesting that based on the economics it was difficult to understand the rationale for nuclear beyond Hinkley Point C. It was deemed that some could argue that there is no role for nuclear power, especially in the mid-2030s onwards. AB now felt that it was now a case of whether the sites, most notably Sizewell and Bradwell, are suitable based on climate change forecasts, as any new plants would be operational until the end of the century. The timescale could result in dangerous waste on-site in the 2100s, when we are unable to accurately forecast events. AB highlighted his concern that government are considering reactors on sites



that are potentially susceptible to flooding and coastal erosion – both which some members felt should be exclusionary criteria in the NPS.

Chris Bowbrick (CB; Deputy Director for Nuclear Generation Policy, Sector Deal, and International) thanked AB for his views, and noted that the presentation would provide a different perspective to the comments raised. CB reminded the Forum of the long ongoing discussions that have been had with members, noting a tele-meeting with MT and AB. CB mentioned that government will again set out the clear need for new nuclear in the upcoming white paper.

Key points from the BEIS presentation included:

- The best way to tackle climate change is through prevention. It is important to recognise that nuclear has a role to play in tackling climate change but also to ensure that our infrastructure is resilient to the possible environmental changes;
- The effects of climate change are considered throughout the reactor lifespan and are accommodated through a combination of precaution and managed adaptation. A combination of both will result in the most efficient outcomes in terms of safety, cost and other environmental impacts.
- The regulatory framework is in place to monitor the suitability of power plants throughout their lifecycle – to ensure developers are building in suitable precautions and that adaptation is being considered and implemented where required.
- The NPS will assess the suitability of sites, including flood risk as a criterion, however in the absence of full project details it is not possible to undertake detailed modelling at the NPS stage. Judgements from independent regulators like the ONR and EA are key.
- All stations will still have to obtain planning permission and environmental permits. The EA, in these assessments, will be looking for evidence that the effects of climate change have been identified and can be managed over the full lifetime of the power station. Where the developer is proposing to use managed adaptation, the EA will look for evidence that it is technically feasible, that there will be sufficient time available between identifying the need for adaptation and implementing it, and that the potential adaptations will be capable of managing the worst possible effects of climate change.
- Before constructing a site, a licence from ONR will also be needed. ONR will expect licensees to identify all potential hazards including the effects of climate change on these. For each of these hazards, ONR will require the licensee to demonstrate that the site is and will remain safe through a combination of precaution and managed adaptation.
- Licensees must review their safety documentation periodically and, as a part of this process, will be required to consider any new evidence on climate



change. This review process may identify the need to implement additional protection against hazards, such as flood risk, and is how managed adaptation is implemented in practice.

- Given the general uncertainty with environmental change, the approach is designed to accommodate changes in science, including climate change predictions. Any new evidence, such as UKCP18, will have to be considered in any assessments for new nuclear power stations and through the periodic safety review process for existing power stations.

In conclusion, precaution and adaptation are the route to managing climate change throughout the lifetime of nuclear power stations.

Alan McGoff (AM) supported the messages of the presentation and reaffirmed that any organisation will need to make a case that their build will be environmentally acceptable. AM further noted that regulation in the UK has an expectation of learning and continued improvement throughout the life of the reactor - it is adaptable.

Comments raised from the Forum include:

- MT noted that the highways around Sizewell are also in flood zone 3, and that flood zones should be exclusionary in the NPS. The member suggested that EDF has continually pushed the boundaries of the site (from 117 hectares to over 300) all within an area of outstanding natural beauty;
- Varrie Blowers (VB) asked the Forum if government would consider building any project in flood zone 3;
- DL noted that climate change will also bring heavier and stronger storms; massive flooding with a site emergency requiring evacuation could be problematic;

CB noted the questions from members and reiterated the previously made point that the process is designed to account for these types of concerns

AB concluded the item, reiterating that members of the forum are still concerned, particularly on the areas of climate change, sea level, and storm surges.

7. AOB

There was no AOB raised by the Forum. Co-Chair Andy Blowers thanked Stephen Speed and BEIS colleagues for their engagement. Stephen Speed thanked members and attendees for their input before and during the meeting and noted that a date would be set for the next Forum later this year.

Review of Actions



BEIS Action: Secretariat to circulate the minutes of the previous Forum to the membership after the meeting.

BEIS Action: Continue discussions on JFF outside of the Forum between UN and RB.

BEIS Action: BEIS to respond to Neil Crumpton.

BEIS Action: Ann McCall to provide a note to the Forum with responses to the questions asked by members



8. Attendees

Attendees	Organisation
NGOs	
Varrie Blowers	Blackwater Against New Nuclear Group
Andy Blowers	Blackwater Against New Nuclear Group
Ian Ralls	Friends of the Earth
Ruth Balogh	West Cumbria North Lakes - Friends of the Earth
Tor Justad	Highlands Against Nuclear Transport
Richard Bramhall	Low Level Radiation Campaign
Neil Crumpton	People Against Wylfa B
Jo Brown	Parents Concerned About Hinkley
Jo Smoldon	Stop Hinkley
Allan Jeffery	Stop Hinkley
Mike Taylor	Together Against Sizewell C
Peter Wilkinson	Together Against Sizewell C
Chris Wilson	Together Against Sizewell C
David Lowry	Nuclear Waste Advisory Associates
Sean Morris	Nuclear Free Local Authorities
Paul Collins	Theberton and Eastbridge Action Group on Sizewell
Alison Downes	Theberton and Eastbridge Action Group on Sizewell



External Attendees	
Caroline Richards	Environment Agency
Alan McGoff	Environment Agency
Ann McCall	Radioactive Waste Management
Simon Napper	Radioactive Waste Management Stakeholder Engagement Adviser
BEIS Officials	
Helen Shirley-Quirk	BEIS
Chris Bowbrick	BEIS
Graham Webber	BEIS
Umran Nazir	BEIS
Craig Lester	BEIS
Stephen Speed	BEIS
Phil Hicken	BEIS