



NGO Forum Minutes
Friday 18 May 2018
Church House, Westminster, London
13:00 – 15:45

1. Welcome and Introductions

Co-Chair Stephen Speed (BEIS Director, Nuclear Directorate) opened the meeting and welcomed all delegates to the NGO forum. Stephen Speed noted that the format of the meeting had been reviewed following feedback from Forum members. As a result, the meeting agenda was structured around the issues raised in the Forum papers “NGO’s Issues of Concern” and “Civil Nuclear Energy Policy - An alternative Perspective”. The new format was intended to encourage open dialogue between NGO members and BEIS.

Stephen Speed explained that Minister Harrington was unable to attend due to his constituency duties. However, every effort would be made to ensure the Minister is able to attend the next NGO Forum meeting.

Stephen Speed outlined the three issues from the Forum papers that would form the basis of discussions:

- 1) Health, Safety and Security
- 2) Decommissioning and Radioactive Waste Management
- 3) Climate Change/Emission Reductions and Energy Policy Choices

Co-Chair Andrew Blowers (Chairperson, Blackwater Against New Nuclear Group) welcomed participants. He noted that NGO Forum members had become somewhat frustrated by the nature and level of engagement between Forum members and BEIS. Andrew Blowers highlighted the contribution NGO Forum members had made to discussions on nuclear, including the recent Geological Disposal Facility (GDF) and Siting consultations. Forum members had contributed both time and effort to consultation responses and the preparation of papers, but many felt this contribution was not always recognised or valued by BEIS. In his view positive engagement would include direct responses from BEIS on issues. Andrew Blowers also encouraged a candid discussion, stating that although it is unlikely that the NGO forum would be able to stop, what he referred to as the ‘nuclear juggernaut’, he wished the concerns of the NGO Forum to be heard.

Other items raised during this introductory section of the meeting included:

- A request for an update on the status of the board advising on nuclear delivery in Suffolk (the Suffolk Energy Coast Delivery Board) and whether similar Boards



are in operation in other areas. Co-Chair Stephen Speed replied that he is unaware of the exact status of the Suffolk Board but took an action to find out.

- Clarification on reports suggesting HMG have been in discussions with Japanese organisations on the development of Wylfa Newydd. Stephen Speed replied that it was not possible for him to comment at this stage.

2. Health, Safety and Security

2.1 Health

Forum members outlined their position on the safety aspects of new nuclear installations. The key points raised during this presentation are summarised below:

- In the framework representing radiation regulation, the public is positioned outside of the framework;
- Ionising radiation is known to cause damage to health;
- Current dose limits are 1mSv to the public;
- Radiation exposure and safety research is typically backed by information from survivors of Hiroshima detonations;
- Small radiation doses during pregnancy lead to health complications;
- The Black report examined a childhood leukaemia cluster. Investigations found men working on Sellafield site were more likely to have children who developed leukaemia;
- Communities are exposed to radiation released in nuclear accidents;
- The need for the UK to be ready for a nuclear accident as a matter of “when” and not “if”; and
- A Biological Effects of Ionizing Radiation (BEIR) Committee report reanalysed by the Nuclear Information Resource Service (NIRS) indicated women experience greater harm than men for an equivalent dose.

In general discussion after the presentation several concerns were highlighted by a Forum member. These included the belief that a ten-fold increase in Cs-137 emissions from Hinkley Point in 2006 had led to an increase in heart attacks, strokes and premature deaths. A call for greater investigation into deaths that are linked to radioactive emissions and for all AGRs to be shut down to avoid a Fukushima scale accident in the UK. In addition, the Forum member highlighted that cracks in the graphite bricks had prevented control rods from operating. This had led to frustration amongst the Forum that various safety issues have been raised but have not been refuted by BEIS. BEIS noted that responsibility for safety rests with the independent nuclear regulators with whom the NGOs also have a forum.



The NGO Forum questioned where the balance lay between the benefit of low carbon power from nuclear and the risk from ionising radiation. Further, they questioned at what point would the perceived benefit of nuclear no longer be worth the risks associated?

There was a discussion on the rationale behind controlled emissions from nuclear sites, particularly as substances containing heavy metals such as lead are prevented in other industries, whilst emissions from nuclear power plants were accepted. The Co-Chair Andrew Blowers questioned if a separate note from the Forum on this issue would be beneficial to focusing discussions.

BEIS provided clarification on points raised by NGO members, highlighting that discharges from regulated sites are within safe limits as defined by international standards. BEIS also noted that the claims of deaths attributable to controlled emissions in the UK were not supported by evidence.

2.2 Safety and Security

BEIS outlined the purpose, history and methods of radiation protection, with the speaker noting that the increase in average radiation dose to workers on nuclear sites is roughly equivalent to two transatlantic flights per year, and that this level of protection gives confidence in the radiation protection framework.

The speaker further noted that the national risk register contains risks from nuclear alongside more likely accident scenarios, such as chemical or pipeline related emergencies. Furthermore, safety related work continuously develops to reflect best practice; if new information indicates there are changes in what is defined as a safe exposure, the regulations will reflect this.

Co-Chair Andrew Blowers sought clarification on nuclear accidents from the speaker and argued that accidents occur and should be planned for, rather than be viewed as abnormal occurrences. Andrew Blowers also highlighted his concern that the established routes used by NGOs to provide input on emergency planning are no longer open.

BEIS officials made clear that security remains a high priority, with government prioritising the protection both to the public and to civil installations. The speaker highlighted that BEIS work closely with the sector to constantly review threats to nuclear installations, as well as to strengthen the regulatory framework. The regulatory framework spans from Ionising Radiation Regulations (IRR17) to the Transport of Dangerous Materials, Health and Safety at Work and the Civil Contingencies Act, amongst others.

BEIS highlighted Health and Safety legislation and informed the meeting that a consultation was launched last year on the Basic Safety Standards Directive (BSSD). BEIS outlined that commensurate planning has been introduced and that prescriptive



regulations have been made with stable iodine distribution. Finally, BEIS highlighted that HMG has engaged with IAEA, ONR and PHE to understand best practice.

The Co-Chair Andrew Blowers noted that this engagement does not include NGOs. However, the Forum were informed that BEIS had engaged in a separate discussion on security issues with a representative of the Nuclear Free Local Authorities.

NGO Forum members noted that EU directive 2014/87 had not been consulted on by government and went on to highlight that the UK should be preparing for severe accidents; the ONR has a comprehensive plan, whilst EDF had adopted an emergency planning zone with a smaller radius. A BEIS official noted that the Detailed Emergency Planning Zone (DEPZ) for Sizewell B is 3.5km, but outline planning extends up to 15km, as required by the ONR.

A member from the NGO Forum noted that several papers on safety and security had been sent to BEIS with no resulting written response or engagement. BEIS reassured the Forum that member's views are valued and that papers are taken seriously when received. Helen Shirley-Quirk, Director of Nuclear responsible for safety and security, informed the meeting that she would be interested to see the emergency planning paper prepared by the Forum. She noted that the Basic Safety Standards Directive aims to be transparent in planning for emergencies and so it would be an appropriate avenue for open dialogue and to strengthen emergency planning. The BEIS secretariat took an action to circulate the security paper once received.

A representative from the Environment Agency stated that discharge levels from nuclear plants meet international standards and operators are required to reduce emissions to As Low As Reasonably Acceptable (ALARA) levels. Radioactive discharges from sites are also monitored by Radioactivity in Food and Environment (RIFE).

3. Decommissioning and Radioactive Waste Management

An NGO member summarised some of the key points raised in the annex to the NGO paper "Civil Nuclear Energy Policy - An alternative Perspective". This included concerns that communities will not be aware of the full implications of hosting a nuclear waste disposal facility and so could not be appropriately informed when engaging in GDF siting discussions. BEIS responded that communities involved in hosting nuclear waste are aware of the implications of a GDF. Furthermore, the communities must be, and will be, given clarity on the scope of the waste to be stored, including the waste generated from future reactors.

NGO Forum members sought clarification on the amount of radioactive waste that would be produced from new build including questions on timescales and location. The Forum expressed further scepticism on whether an appropriate and effective technology able to deal with nuclear waste would arise in the future. BEIS responded



that each new nuclear site must have a funding plan for decommissioning and waste management.

The Forum stated that legacy waste must be given priority over waste from new build projects. The Forum further expressed concern whether a potential future GDF will be able to store the waste from both legacy reactors and new build projects. BEIS responded stating that a future GDF will be designed as a modular facility; able to incorporate legacy waste and expand to meet future waste requirements.

BEIS further noted that the National Policy Statement on a GDF is to be scrutinised in parliament in June and July 2018.

Several other points and questions were raised by Forum members including:

- The predominant method of handling waste is storage as spent fuel;
- There is less spent fuel emplaced in the Sizewell B dry waste store than will be generated from a new reactor. There are questions to be answered on whether spent fuel from a new reactor will be able to be stored in a dry store;
- Sellafield appear to be progressing well with their decommissioning programme, from an NGO perspective;
- New reactors will have a higher burn-up rate and as a result produce higher activity waste. This will be likely stored by the coast in wet store casks, which presents risks to the integrity of radioactive waste storage;
- Decommissioning and radioactive waste plans that look so far into the future are not credible;
- The UK does not need a GDF and plutonium should be immobilised in near surface storage facility;
- A GDF should be confined to legacy wastes;
- A suitable and acceptable sit may not be found and therefore a GDF may not be available to take wastes in the foreseeable future;
- Radiation levels of nuclear waste should be accurately reported to the public;
- There are concerns over perceived inaction and lack of vision in HMG plans for the future for waste management;
- Optimum geology should be chosen in favour of engineered solutions; and
- Waste should not be stored on site into the next century.

4. Climate Change/Emission Reductions and Energy Policy Choices

Tim Lord, BEIS Director of Clean Growth, discussed Government's strategy for decarbonising the UK power sector by 2050, thereby delivering the clean growth strategy. Three key points were highlighted:

- The importance of renewables to the UK energy mix.



- HMG planning has allowed for a diverse energy mix into the 2030s and 2050s.
- Levels of carbon emitted via heat production and transport were acknowledged.

The aim through this work is to meet the three pillars of energy supply; Reliable – Affordable - Clean; better known as the energy trilemma.

The Forum responded to BEIS and highlighted that the papers prepared by the Forum were intended to address the aspects of new build focused to the energy trilemma. Reference was made to several points in the NGO papers, including reducing the need for baseload power, the benefits of back-up power supply sources (i.e. gas fired power stations) and support for CCS with long term carbon storage. BEIS noted that issues with CCS technologies meant that gas-fired power stations are not carbon-free. In response the NGO Forum highlighted that gas-fired power stations can be used with low net-carbon fuels (e.g. biogas). BEIS acknowledged that these options are being considered, however there are no reliable models to predict the price of such plants.

The NGO Forum pointed out that HMG support for renewables has reduced, leading to additional imports of gas for energy production. BEIS responded that the UK remains the world leader in offshore wind and are progressing towards their onshore wind commitments. Furthermore, renewables are supported from HMG if the price is appropriate. Renewables form part of a liberalised power generation network.

The NGO Forum stated that nuclear power appears to be given a privileged position within the energy market, in the form of subsidies and foreign funding. The Forum highlighted that HPC has a guaranteed price for 35 years, and that both Wylfa and Moorside projects do not look feasible but continue regardless. Forum members asked how HMG intends to reach a deployment of 16~18 GW of nuclear new build. Nuclear is viewed as a long-term project and must be planned for in this manner.

Forum members responded that nuclear power has had consistent support, as opposed to wind power. BEIS highlighted several points regarding nuclear new build:

- HMG promotes these projects when it is financially appropriate;
- The time scales involved allow optionality over the build period of a nuclear reactor;
- Future nuclear is likely to be at a lower price than HPC, as HPC is the first of a kind and the first to be built in the UK for a generation; and
- Nuclear provides unique benefits (e.g. low carbon, low marginal cost, always on, reliable base-load generation with a very long project lifetime).

A member of the NGO Forum asked whether there are lifecycle CO₂ estimates for HPC (including construction, uranium mining operations, etc.). BEIS responded by stating that terrestrial CO₂ emissions are included when evaluating plants. An observer to the NGO Forum (from the Committee on Radioactive Waste Management) stated



that the build design quotas for HPC included uranium mining in CO₂ lifecycle estimates.

A number of other issues were raised by NGO Forum members:

- The projected 2025 completion date of HPC will not be met, leading to CO₂ emissions from fossil fuels required to fill the gap;
- An interconnector project is underway to provide 11GW of transfer capacity between UK and mainland Europe;
- France has a strong reliance on nuclear power. However, the country is moving away from nuclear to generate power from renewable sources;
- While HMG expected a 15% increase in electricity demand, Forum members commented that there been a 15% reduction in demand;
- When nuclear reactors are offline, this leads to an increased fraction of solar production;
- Renewables, while intermittent, can be predicted using meteorology; and
- When a nuclear plant is taken offline, there is little that can be done to replace the capacity.

5. Reflection and Summary

Andrew Blowers noted the meeting had led to a robust exchange of views. Further, he suggested that the next NGO Forum meeting focus on siting. The siting of nuclear plants is a key concern and as a result would generate discussion on a range of issues.

Stephen Speed concluded that BEIS are committed to decarbonising the UK energy system. To this end, nuclear should be viewed in the same way as other sources in the UK energy mix.

A member of the NGO Forum expressed dissatisfaction with the new meeting format, requesting a written response to the NGO papers. Stephen Speed noted that answers to some of the points raised by the NGO papers are already available in material published by HMG and is publicly available. The Forum replied that this material is not easily accessible, so is not seen to be transparent.

6. AOB

NGO Forum members raised several points including:

- Forum members noted that the GDF 'Working with Communities' consultation is now closed and requested information on when the outcome will be published. Further clarification on the GDF rollout process was requested.



- Grenfell Tower and the failure of Carillion present lessons learned on lack of regulatory oversight and being “too big to fail”. It was pointed out that these risks are unacceptable in the nuclear industry.
- The Euratom exit process and the issues it presented to the nuclear industry were also raised. BEIS responded that safeguards and replacement processes are a priority.

The Co-Chairs thanked participants for their contribution noting that the next meeting of the NGO Forum will take place in September 2018.

7. Attendees

Attendees	Organisation
NGOs	
Sean Morris	Nuclear Free Local Authorities (NLFA)
Jo Brown	Parents Concerned About Hinkley (PCAH)
Mike Taylor	Together Against Sizewell C (TASC)
Rod Donington-Smith	Cumbria Trust
Andrew Blowers	Blackwater Against New Nuclear Group (BANNG)
Jill Sutcliffe	Nuclear Waste Advisory Associates
Neil Crumpton	People Against Wylfa B
Ian Ralls	Friends of the Earth Network
Peter Banks	Blackwater Against New Nuclear Group (BANNG)
Allan Jeffrey	
External Attendees	
Caroline Richards	Environment Agency (EA)
Alan McGoff	Environment Agency (EA)
Daniel Jones	Office for Nuclear Regulation (ONR)
Simon Napper	Nuclear Decommissioning Authority (NDA/RWM)
Observers	
Gregg Butler	Committee on Radioactive Waste Management (CoRWM)
Andrew Walters	Committee on Radioactive Waste Management (CoRWM)
BEIS Officials	
Stephen Speed	Co-Chair, Director of Nuclear
Tim Lord	Director for Clean Growth, BEIS
Umran Nazir	Deputy Director for Decommissioning & Radioactive Waste
Helen Shirley Quirk	Director of Nuclear
Huw Davies	Head of Policy, Safety and Sponsorship
Craig Lester	Deputy Director for Strategy, Engagement and Innovation
Nasrine Fielding	Head of Resilience Regulatory Framework
Lindsey Butterworth	BEIS



Department for
Business, Energy
& Industrial Strategy

Attendees	Organisation
Francesca Broadbent	BEIS
Scott Hudson	BEIS
Simeon Agada	BEIS
Alasdair Harper	BEIS
Daisy Ray	BEIS
Samuel Ha	BEIS