

## NIRAB Meeting

Monday 6<sup>th</sup> December 2021

BEIS Conference Centre, 1 Victoria Street, London, SW1H 0ET; and virtually on MS Teams

### Attendees

NIRAB: Francis Livens (Chair), Alyson Armett, Maggie Brown, Gordon Bryan, Gregg Butler, Alun Ellis, Kirsty Gogan, Martin Goodfellow, Mike Lewis, Edoardo Patelli, Amanda Quadling, Fiona Rayment, John Stairmand

Virtually: Kirsty Armer, Malcolm Joyce

BEIS: Professor Paul Monks (CSA), Si Dilks (SICE)

NIRO: Robert Alford, Clare Bayley, Sasha Davies, Greg Evans, Dave Graham, Jeff Holliday, Jacob Home, Dan Mathers, Aiden Peakman, Lucy Platts, James Wiseman.

Virtually: Greg Black (NIRO), Sasha Davies (NIRO), Lindsay Jamieson (ND)

Apologies: Matthew Billson (BEIS)

### 1. Welcome / intro from Professor Francis Livens, Chair of NIRAB

This is the first in person meeting of the refreshed NIRAB 3. A key objective for this meeting is develop the NIRAB work programme.

### 2. Introductions to NIRAB members and NIRO Team

Attendees of the meeting introduced themselves and gave brief insight on what they want to see NIRAB achieve over the next three years. A key message is to convey a sense of urgency to Government in order to enable nuclear energy to contribute to Net Zero by 2050, via multiple energy vectors.

### 3. Update from BEIS

Members were welcomed to the refreshed NIRAB and thanked for offering expertise to the advisory body. The advice from NIRAB 1 & 2 have been instrumental in supporting BEIS thinking on nuclear R&D.

It was confirmed that the Advanced Nuclear Fund (ANF) will support £385m of capital investment, for the delivery of new nuclear projects and supporting R&D. The second phase of the low cost nuclear (LCN) programme was announced in November.



BEIS ran a Call for Evidence on Advanced Modular Reactors (AMRs) from July to September 2021, seeking views on the government's preference to explore the potential of High Temperature Gas Reactors (HTGRs) for the Advanced Modular Reactor Research Development & Demonstration (AMR RD&D) Programme. Following a review of the evidence put forward, the Rt Hon Greg Hands MP, Minister of State for Business, Energy and Clean Growth confirmed HTGRs as the technology choice for the AMR RD&D Programme moving forward, with the ambition for this to lead to a demonstration by the early 2030s. BEIS stressed that this does not prevent other technologies coming forward.

#### 4. Update from NIRO

NIRO provided an overview of the progress made to date by NIRAB 1 & 2; the Nuclear Innovation Programme (NIP), and other areas such as the 2020 Energy White Paper and Ten Point Plan. The NIRAB website contains useful links that NIRO consider to be useful to members. Members are asked to make suggestions for other documents to include.

#### 5. Introduction from Professor Paul Monks, Chief Scientific Advisor, BEIS

Reflecting on the challenge of Net Zero, the UK may need to double electricity generation by 2050. The Committee on Climate Change (CCC) have highlighted the importance of low carbon firm capacity, and it is difficult to see where this will come from without nuclear power. It is noted that nuclear energy has had historic challenges from legacy deployment, however lessons have been learnt and best practise with full life-cycle considerations is being implemented.

An ambitious R&D programme is needed to enable nuclear energy to reach areas that are challenging to decarbonise. BEIS want to engage with the entire nuclear sector on R&D. NIRAB were asked for their views on nuclear sector R&D going forwards.

#### 6. Work programme

The NIRAB work programme has been evolving since the inception meeting on 21<sup>st</sup> September 2021.

Following further discussion of the work programme, the initial workstreams emerging from discussion are:

- Review of the Nuclear Innovation Programme, and gap analysis to inform future R&D programme;
- End user engagement and scenario planning to understand the potential for deployment of nuclear energy to support multiple energy vectors;



- Engagement with regulators on approaches to innovation and programmes required for the timely regulation of AMR systems.

The work programme will be developed further following this discussion.

## 7. NIRAB updates to BEIS

NIRAB will update BEIS on their areas of work going forwards.

## 8. AOB

### a. Terms of Reference and Ways of Working

Members agree the document can be signed off, with a point of clarification that it applies only to their work on NIRAB.

### b. Next meeting

The next meeting of NIRAB will be February 3rd 2022, to be held virtually.

### c. Observers

NIRAB request that Observers to the Board should be given some consideration, including representation from EPSRC.

