

# UK NUCLEAR INDUSTRY COUNCIL

27<sup>th</sup> February 2013

## MINUTES OF THE FIRST MEETING

### Summary of Actions

	Who	Action
1	Council members	Industry to consider how they resource the Nuclear Industry Council with human resource (in-kind contribution) and expertise to make the Council a success
2	Council members	Industry to consider further the sub-groups and work streams of the Council
3	Council members	Council to establish a delivery work stream that would be kept abreast of overall implementation of the Action Plan and to take on delivery of those attributable to the Council. The work stream would prioritise the actions for delivery.
4	Council members	Members of the Council to input to the Nuclear Industrial Strategy within two weeks (*13 <sup>th</sup> March), by arranging discussions with BIS/DECC/NIA or by sending in written comments.
5	Council members	The Nuclear Industry Council would provide oversight of the highest priority areas for skills and the progress on delivering skills in the most important areas
6	Council members	Council members to establish Cost Reduction Working Group which will work up proposals for Cost Reduction Programme aimed at identifying how nuclear as a whole could reduce cost, whilst not compromising safety.
7	Secretariat	NIC Secretariat to arrange next meeting, suggested as 10th July

### Attendees

Rt Hon Ed Davey MP

Rt Hon Michael Fallon MP

Lord Hutton of Furness, NIA

Rt Hon John Hayes MP

Rt Hon Dr Vince Cable MP

Clive White, Amec

Philippe Knoche, Areva

Martin Grant, Atkins

Roger Hardy, Babcock International

Greg Ashley, Bechtel

Adrian Worker, CH2M Hill

Professor Andrew Sherry, Dalton Institute

Bill Bryce, Doosan Power Systems

Sir Stephen Gomersall, Hitachi

## UK Nuclear Industry Council

27<sup>th</sup> February 2013

Alan Raymant, Horizon

Mike Clancy, Prospect

Ceri Richards, Laing O'Rourke

Lawrie Haynes, Rolls Royce

Professor Richard Clegg, Lloyd's Register

George Beveridge, Sellafield Limited

Peter Greenhalgh, M&W Group

Kevin Coyne, Unite

Professor Keith Ridgway, NAMRC

Helmut Engelbrecht, Urenco

Jon Phillips, NDA

Keith Cochrane, Weir Group

Jo Tipa, NESA/NSAN

Mike Tynan, Westinghouse

Keith Parker, NIA

Chris Pook, BIS

Professor Paul Howarth

Janice Munday, BIS

Mike Hawe, NES Limited

Mark Higson, DECC

Olivier Carret, NuGen

Hergen Haye, DECC

### Observers

Colin Patchett, Office for Nuclear Regulation

Alan McGoff, Environment Agency

Gwenllian Roberts, Welsh Assembly Government

### Apologies

Vincent de Rivaz, EDF Energy

Lady Barbara Judge, UKTI

### Main points from the meeting

#### **Welcome and Introductions**

Edward Davey, Secretary of State for Energy and Climate Change, chaired the meeting. Both Secretaries of State and Lord Hutton welcomed all Council members to the inaugural meeting. They emphasised the importance of taking a long-term, strategic approach to the challenges and opportunities that lie ahead for all parts of the nuclear industry, and looked forward to creating an effective Government-industry partnership. Vince Cable and Michael Fallon both highlighted the importance HMG attaches to the Council and to the development of the Nuclear Industrial Strategy to help ensure commercial success.

#### **Terms of Reference / Ways of Working [Paper #1]**

The terms of reference were agreed. The chairman reiterated the importance of the Council being focussed on implementation and delivery. To do that, the Council would need to identify its priorities collectively and develop workstreams through sub-groups. That would require the contribution of resources from both Government and the organisations



## UK Nuclear Industry Council

27<sup>th</sup> February 2013

represented on the Council, as well as drawing in resources from elsewhere on specific issues/projects as necessary.

**Action 1:** Industry to consider how they resource the Nuclear Industry Council with human resource (in-kind contribution) and expertise to make the Council a success

**Action 2:** Industry to consider further the sub-groups and work streams of the Council

### Implementing the Nuclear Supply Chain Action Plan [Paper #2]

The Chairman explained the background to the Nuclear Supply Chain Action Plan (NSCAP) as a forerunner to the wider Industrial Strategy. Its focus was on the near term, identifying barriers such as investor confidence, competitiveness and skills challenges.

A proposal to implement the actions had been developed and a number of the actions are already being progressed through various fora, including through the NIA's New-Build Programme Management Board, chaired by Lord Hutton.

As a number of the actions were specifically related to new-build, the governance for those actions should continue to rest with the NIA Programme Management Board. It was agreed that the Council govern the implementation of those actions applicable to the broader industry as a whole.

The main points made in discussion were:

- Success measures. The Council will need to define success measures for both the NSCAP and the Industrial Strategy.
- NSCAP – short-term priorities. The Council would need to prioritise the NSCAP actions as some will have bigger near term gains than others.
- Industrial Strategy/NSCAP. Both of these need to be properly integrated, recognising the NSCAP has a near-term, primarily new build focus and industrial strategy is broader and longer term. Both would also evolve over time, in response to changing circumstances. Council members would need to be directly involved in shaping that evolution, ensuring that the Industrial Strategy and NSCAP were up to date and continued to be relevant. That included recognition of where UK-based manufacturing had strengths and weaknesses.
- Waste management. Waste management and decommissioning was already big business and should be viewed alongside new build as one of the promising areas for generating economic growth.

**Action 3:** The Council to establish a delivery work stream that would be kept abreast of overall implementation of the Action Plan and to take on delivery of those attributable to the Council. The work stream would prioritise the actions for delivery.

### **Nuclear Industrial Strategy [Paper #3]**

The chairman explained that this was the key item on the agenda and he was keen to have industry views on the draft document. The chairman outlined the benefits to publishing the Strategy in March to help ensure industry and Government focus on what is important, however he was clear that the Strategy would not be published until it has the backing of industry and the Council.

Minister for Business and Enterprise, Michael Fallon, introduced this item in more detail, explaining that it was one of several sectoral strategies being developed by Government. The draft Strategy document built on much of the work undertaken last year in close consultation with industry, in particular the Nuclear Industrial Vision Statement, and the response to the House of Lords report on nuclear R&D capabilities, and had been revised on the basis of the comments received from industry so far.

The main points made in discussion were:

- Publication process - Views of the Council on the readiness of the Strategy for publication were varied. Some members felt that more time was needed for further consultation and for more content to be added. Conversely, a good number of participants felt the Strategy is a strong document and represents a solid starting point which the industry can take forward.

The need for prompt publication was also echoed with some additional views about the need to keep the Strategy and the material responding to the House of Lords together with a desire to see all the material published quickly.

The Chairman of the NIC balancing the varied comments received suggested further opportunity for those that wanted to actively engage with BIS/DECC and the NIA on the Strategy over the next 2 weeks in order to try and publish by the end of March. The House of Lords response documents are to be published alongside the Industrial Strategy.

Participants agreed that it should be possible to revise the Strategy for it to be ready later next month.

- Milestones. More would need to be done, either in the Strategy document itself or subsequently, to identify milestones, e.g. the number of reactors that would be delivered, whether a new Mox plant would be built. It was, however, pointed out that Government energy policy was based on using market mechanism to drive competition from which specific technologies would be taken-up, rather than setting targets.



## UK Nuclear Industry Council

27<sup>th</sup> February 2013

- Near-term actions and long-term R&D. The Strategy would need to ensure a clear distinction was made between near-term projects and longer-term activities, such as R&D. But the synergies between the two would also need to be recognised, for R&D activities can provide solutions to existing supply chain challenges, and help bolster stakeholder confidence over the long-term.
- Small Modular Reactors. This is mentioned in the Strategy as a potential market opportunity for the UK. The technology involved for commercial civil nuclear applications was quite different from that used in submarines, and the Strategy would need to ensure that was made clear.
- Workforce number. The Industrial Strategy quoted different figures on the numbers employed in the nuclear industry, and future projections about that. It was agreed that the Strategy would need to be as clear as possible about the underlying assumptions made by these separate sources.
- Audience and messaging. It was suggested that the Strategy could include more regarding EMR and price/investor climate and price for consumers, plus the role of nuclear as part of the energy mix. The chairman explained that the Strategy was aimed at a variety of audiences – the UK, international industry/investors, the media, consumers. That requires a balance to be struck in its coverage and length. The ministerial foreword would seek to capture some of these points.
- The need for certainty. The work currently underway to strengthen the UK industrial base was welcomed, but industry needed certainty and that was also necessary if investment decisions were to be made now.

Overall, Council members generally welcomed the draft Industrial Strategy document, as it laid the foundation for Government and industry to work constructively together, and was expected to attract interest, including from overseas.

**Action 4:** Members of the Council to input to the Nuclear Industrial Strategy within two weeks (\*13<sup>th</sup> March), by arranging discussions with BIS/DECC/NIA or by sending in written comments.

### **Skills for the UK civil nuclear programme [Paper #4]**

Energy Minister John Hayes introduced the Skills paper. He welcomed the work already underway by the Nuclear Energy Skills Alliance (NESA) to identify and address potential skills gaps. Industry was playing an active role in this and employers are leading the way by defining their skills requirements and investing in training.

The Council would wish to provide oversight of the work of NESA, and keep abreast of progress on the highest priority areas. The Council may also wish to ensure that work on skills was focused on industry priorities and continued at pace to meet the workforce needs

**UK Nuclear Industry Council**  
27<sup>th</sup> February 2013

of the new build programme, as that was where some of the greatest pressures were likely to occur.

The main comments from Council members were as follows:

- Current skills shortages. The skills paper mentioned 'potential' skills shortages, but some Council members considered them to be occurring already, leading to wage inflation. There were problems recruiting staff due to a lack of confidence in the future of the sector and workers are also being lost to overseas markets or different industries. To deliver more people into this sector there has to be confidence of a future. The Council has a role to play through the work in the Strategy and publishing that now would help to create this.
- Focus on all areas of skills. There was a need to ensure skills development at all levels, and not just to focus on those required for new build in the short term. The UK is in danger of losing subject matter experts who will be required for future challenges such as managing plutonium safely.
- Knowledge transfer/retaining experience. Given the aging workforce and the ongoing loss of expertise through retirement, knowledge transfer was key to develop new subject matter experts, and R&D was crucial to that. Experience is also crucial as well as qualifications – e.g. regulators need 10 years experience. R&D can help to accelerate gaining of experience.
- Fuel manufacture skills. The UK currently has an indigenous skills base of 1500 people in fuel manufacture. It will be important to work to retain that.
- Construction skills. One of the biggest risks to new build was in the construction phase and so we needed to focus on these skills, too.
- Current capability. The Strategy currently states that we have the capability now to deliver 44% of the new build programme. One Council member thought this optimistic. There is range of views on this issue and this would need to be clarified in the Strategy.

<p><b>Action 5:</b> The Council to provide oversight of the highest priority areas for skills and the progress on delivering skills in the most important areas</p>
---

### **Cost Reduction Programme [Paper #5]**

The chairman emphasized that competitively priced and reliable energy lies at the heart of the UK's energy policy. Cost competition with other forms of low carbon generation will only increase. It was proposed to start a work-stream targeted at determining how nuclear costs could be reduced in the long-term, from the supply chain, innovation and contracting strategies to unnecessary regulation and financing issues. This programme of work was not about reducing the costs associated with 'First of a Kind', rather about



## UK Nuclear Industry Council

27<sup>th</sup> February 2013

ensuring that the Government and industry remain focussed on cost efficiency as the nuclear programme evolves. Similar exercises have been undertaken by the Offshore wind and CCS sectors who have established aspirational cost reduction targets for the future and this sector needs to do the same as well as committing to this process publicly.

The chairman invited the Council for their views on the proposal, with a view to bringing forward a detailed proposal for consideration. The following comments were made:

- Cost reduction a priority. The focus on cost in the industry was already strong but this may not be visible outside of the industry. It was second only to safety. Harnessing collective effort would be vital in this area, and Council members would be interested in seeing a detailed proposal, which they would like to support.
- Type of costs reduction project. There were two types of challenge in seeking cost reduction: one was based on R&D providing a paradigm shift, and the other was based on incrementally doing things better. It will be important to draw on the considerable expertise within the Council in scoping this project, and have senior people fully involved.
- Safety, quality and value. It was universally agreed that safety and quality should not be compromised through cost reduction. R&D and innovation are key for the UK supply chain, and the scope to reduce labour costs run into difficulties when compared to some nations, e.g. India. Also, costs should take into account the importance of improving value, and time as a factor in cost reduction – these are not straightforward or the same thing. Further, there are values that have not been monetised, eg, nuclear energy offering grid stability.
- Economies of scale. This was essential – we need a long term market. In S Korea, every doubling of orders has led to a 15% reduction in price.
- Cost of end product. The cost of the end product should be the focus, not the individual components. The low carbon challenge has so far broadly avoided comparing the price of different technologies – should this happen, this would be unhelpful and we should work to avoid it where possible.
- Avoiding cost increases. We should not only look at reducing costs but also at how to avoid costs increasing i.e. through better project, programme and construction management.

**Action 6:** The Council agreed to work up proposals at how nuclear as a whole could reduce cost, whilst not compromising on safety.

### General discussion points

## UK Nuclear Industry Council

27<sup>th</sup> February 2013

It was commented that the Nuclear Council needs to concentrate on the bigger picture – it should create a ‘big UK nuclear programme’ setting out what we are trying to achieve over the next 30 years.

It was also felt whilst it was important to look at UK nuclear strengths that there is a SWOT analysis done that covers the areas of weakness.

It was observed with the Nuclear Industrial Strategy that really what it needed to achieve was confidence on the part of industry and investors that there would be a new build programme and when and how that would take place, even if there cannot be specific Government targets. The question was posed how other sectors manage to achieve this confidence without targets. Michael Fallon suggested the example of the automotive Council which has now reached a level of maturity where the industry is willing to share positions within commercial law and arrive a joint approach on what is in the UK’s automotive sector’s best interests. The suggestion from the Nuclear Industry Council in response was that the sector needed a narrative or story.

### **Next Council meeting and AOB**

The date of the next meeting was pencilled in as the 10th July, but this may be subject to change.

Standing items on the agenda will include, skills, NSCAP and cost reduction.

Reflecting the focus of this meeting on policy issues, the next agenda will be more industry-focused. Lord Hutton is likely to chair.

<b>Action 7:</b> NIC Secretariat to arrange next meeting, suggested as 10th July
--