

10th July 2013**MINUTES OF THE SECOND MEETING****Summary of actions**

	Who	Action
1	Delivery Monitoring Group	Delivery Monitoring Group to draft proposals to be presented at the next NIC meeting.
2	NIC Secretariat & Industry	The remit of Nuclear Owners Strategy Group would be finalised.
3	Skills workstream	An update report on the Skills workstream to be provided for the next NIC meeting, as appropriate.
4	Trade & Investment workstream	Trade & Investment workstream to develop 'coherent UK offer' narrative for use by Government and Industry
5	Trade & Investment workstream	Workstream to consider balance between focus on trade and investment and order of actions, including the inward investment actions contained in the NSCAP and NIS.
6	Business Capability workstream	Full update on Business Capability work to be provided at next NIC meeting.
7	Cost Reduction workstream	Cost Reduction work to proceed and report back to NIC at next meeting.
8	Public Understanding workstream	Paper on Public Understanding to be produced for next NIC meeting
9	NIC secretariat	Secretariat to identify and communicate the date of the next Nuclear Industry Council meeting

Attendees

Lord Hutton of Furness, NIA (Chair)	Olivier Carret, NuGen
Rt Hon Ed Davey MP	Sir Stephen Gomersall, Hitachi
Michael Fallon MP	Alan Raymant, Horizon
Clive White, Amec	Stephen Hockaday, Laing O'Rourke
Robert Davies, Areva	Professor Richard Clegg, Lloyd's Register
Chris Ball, Atkins	Peter Greenhalgh, M&W Group
Roger Hardy, Babcock International	Melanie Brownridge, NDA
Greg Ashley, Bechtel	Jean Llewellyn, NESA/National Skills Academy for Nuclear
Adrian Worker, CH2M Hill	Keith Parker, NiA
Professor Andrew Sherry, Dalton Institute	Professor Paul Howarth, NNL
Douglas McQueen, Doosan Power Systems	Mike Hawe, NES Ltd
Vincent de Rivaz, EDF	Mike Clancy, Prospect



10th July 2013

Robert Zadora, NuGen

Lawrie Haynes, Rolls-Royce

George Beveridge, Sellafield Ltd

Kevin Coyne, Unite

Helmut Engelbrecht, Urenco

Keith Cochrane, Weir Group

Mike Tynan, Westinghouse

Lady Barbara Judge

Observers

Colin Patchett, Office for Nuclear Regulation

Professor David Delpy, Engineering & Physical Sciences Research Council

Alan McGoff, Environment Agency

Ron Loveland, Welsh Assembly Government

Officials

Chris Pook, BIS

Janice Munday, BIS

Mark Higson, DECC

Hergen Haye, DECC

Main points from the meeting

Welcome and opening remarks

Lord Hutton of Furness chaired the second meeting of the Nuclear Industry Council. He welcomed members and emphasized the importance of taking forward the actions of the Nuclear Supply Chain Action Plan (NSCAP) and Nuclear Industrial Strategy (NIS) to enable the nuclear industry to provide secure, competitively priced, low carbon energy to meet the needs of UK domestic and industrial customers.

Edward Davey, Secretary of State for Energy and Climate Change, also welcomed progress made with putting in place an implementation structure for the Council, and commended the positive response from Council members on resourcing the different workstreams. He provided an update on Government progress, noting that strike price negotiations with EDF regarding Hinkley Point C were on-going, the recent announcements of a UK finance infrastructure guarantee for Hinkley, further details of the Electricity Market Reform (EMR) package and recent DECC restructuring. He also noted the recent announcement of the continuation of funding for science and research in the 2015-16 Spending Review, an increase of £185m for the Technology Strategy Board, the creation of a new employer owned fund to co-finance skills, and continued funding for the Advanced Manufacturing Supply Chain Initiative and the Regional Growth Fund.

The representative from EDF concurred with Edward Davey's comments on the good progress with the Hinkley Point C discussions, noting that there remained issues to be resolved but he was positive a successful outcome for both parties could be reached. He



10th July 2013

recognised the need to ensure that nuclear energy provided a fair deal to British consumers and investors.

The representative from Hitachi noted their recent supply chain opportunity events and the continued importance of EMR and Contract for Difference (CfD) framework in supporting finance/investment decisions.

Implementation proposals [Paper 1]

The implementation proposals were agreed. The five workstreams were outlined; each led by an NIC Member: Skills, Trade and Investment, Business Capability, Cost Reduction and Public Understanding of Nuclear Energy. In addition to these workstreams progress tracking would be undertaken by the Delivery Monitoring group led by an NIC Member and assisted by the Secretariat and others from each workstream as necessary. A further group, to be known as the Nuclear Owners Strategy Group, would include developers and focus on those strategic issues common to large energy infrastructure developments. Discussions were continuing about the precise remit of the group.

As detailed in the structure diagram, progress with R&D issues and with the NIA's Programme Management Board activity (over and above that of the Programme Readiness Board) would be reported separately to the Council.

In discussion, the following points were made:

- It would be useful to develop a reporting system and ensure the monitoring regime was effective, especially in identifying areas where corrective action was necessary. Proposals would be put to the NIC at the next meeting.
- Workstream leads volunteered to take on their roles and participation in the workstreams was also on a voluntary basis. A small Secretariat had already been formed consisting of staff from DECC, BIS and NIA to facilitate the work of the Council, funded out of existing resources. The expectation was that the Council members would resource the workstreams from their organisations, which was the common practice with all industrial councils, and was essential for their success.
- The importance of the work of the proposed Nuclear Owners Strategy Group was reaffirmed.

Action 1 Delivery Monitoring Group to draft proposals to be presented at the next NIC meeting.

Action 2 The remit of Nuclear Owners Strategy Group would be finalised.



10th July 2013

Skills – Nuclear Workforce Model [Paper 2]

The chairman introduced the item and the joint Council Skills workstream leads provided an update on the work that had been carried out so far to take forward the skills agenda.

The update focussed upon the new Nuclear Workforce Model (NWM) - a ground-breaking initiative in mapping future skills supply and demand requirements across the whole of the nuclear industry. This initiative was welcomed by NIC members and the chair thanked both leads for taking this work forward.

It was added that the NWM would be particularly useful in providing data about skills needs from a top tier company perspective, and that it would need to be extended down supply chains, including to SMEs. The bigger companies were likely to have good data about long-term forecasts, but smaller enterprises were perhaps not so well placed to identify future needs.

The Council was informed that the Nuclear Energy Skills Alliance was proposing a workshop in October to help further populate the NWM.

The Nuclear Industry Council was proposed as the appropriate forum of Government and Industry leaders to provide oversight and direction to skills development across the Industry for the Industrial Partnership. This approach was agreed.

The following points were made in discussion:

- The work of the NWM was welcomed and the opportunity to take a longer-term view in regards to this work was noted.
- The recent agreements between EDF and Trade Unions were noted and welcomed. This was expanded upon by statements of the importance of developing routes to up-skill the workforce and the key role of apprenticeships along with the common interest in delivering to time and cost and thus creating a competitive industry that could provide long term employment opportunities in the UK.

Action 3 An update report on the Skills workstream to be provided for the next NIC meeting, as appropriate.

Trade & Investment [Paper 3]

The chair referenced the enormous opportunities in overseas nuclear markets and scope for inward investment. There was considerable Council interest and support for the development of a more coherent “UK PLC” offer.

The initial work focussed upon trade. Key questions for the Council to address in relation to the Trade & Investment workstream were:

- Which part of the nuclear life cycle should be the main focus?



10th July 2013

- Which countries should be particularly target, e.g., with niche expertise or products?
- What are our strengths which we should exploit in trade initiatives?

It would be necessary to adopt a clear focus to have the most effective results.

The UKTI strategy would be developed in close consultation with industry.

The following points were made:

- How the UK promotes its capabilities is very important.
- Overseas feedback showed that the UK's regulatory regime (design approvals and assessing environmental impacts) was one of our strengths, and should form part of this work.
- Edward Davey agreed that we need to prioritise our efforts and be consistent in our message. He would welcome the development of a 'coherent UK offer' narrative for use by Government and Industry.
- Different reactor designs globally should be considered when deciding how to position the UK proposition overseas. A clear focus and a systems integrator approach would work well in presenting UK PLC.
- Skills should also form part of the UK PLC offer, so there was a role for NSAN here, especially in attracting overseas students.
- We should make the most of UK efforts on this front through effective links between UKTI and NiA and by drawing in regulators, the NDA and academia – these all form part of the UK offer.
- Inward investment was an important part of this workstream.

Action 4 Trade & Investment workstream to consider balance between focus on trade and investment and order of actions, including the inward investment actions contained in the NSCAP and NIS.

Action 5 Trade & Investment workstream to develop 'coherent UK offer' narrative for use by Government and Industry

Business capability [Paper 4]

The Chair reiterated a desire to avoid duplication of work and to capitalise on work being taken forward under the auspices of the NiA's Programme Management Board Readiness Programme. For this workstream to progress well, client organisations would need to provide their input.



10th July 2013

Good progress was being made with the NiA work on Readiness, and the Council's approval or comments were important for that work. It was suggested that a full update be provided at the November NIC meeting.

The NiA work was looking at a number of issues – design, installation, construction, maintenance and commissioning new plant. The NIS and NSCAP was a rallying call, and industry should respond positively to that. Continued government support was welcomed for Nuclear AMRC/Fit for Nuclear programme and Nuclear AMRC was considered to be an excellent national asset, with sensible arrangements in place to protect intellectual property rights. The scope for improving supply chain quality processes and capability was considerable, though many SMEs were not positioned to make the necessary investment. The challenge is not just about capability, but also competitiveness and that includes striving to be competitive internationally.

In discussion the following points were made:

- It was noted that Nuclear AMRC was focussed on manufacturing, and wondered whether it could cater for construction needs. This was discussed last year in terms of the potential for drawing on the experience of the Nuclear AMRC to create a parallel organisational focus to address best practice in construction for the nuclear programme. Construction was a more disparate sector and more challenging to corral, but this could be revisited if there was a consensus that this was important. It was added that construction was relevant to and an important part of decommissioning.
- The Nuclear AMRC had considerable potential which could be exploited to improve business capability. The Nuclear AMRC was already involved in the Readiness Programme and this would be extended with a new group on manufacturing technology. The challenge was to deliver value across all parts of the supply chain.

Action 6 Full update on Business Capability work to be provided at next NIC meeting.

Cost Reduction [Paper 5]

The Chair highlighted the importance of ensuring this programme of work addressed a wide remit, including the costs associated with the regulatory regime and the financing of new nuclear. Other cost reduction programmes had been successfully executed in other sectors, offshore wind and CCS, and it was an issue that the nuclear industry was already focussed on daily given the global nature of the market, but also recognised that there was more to do. The Terms of Reference were discussed and approved.

Nuclear costs were much broader than capex, and also included those costs associated with delays, the costs of capital and the cost of accommodating risks. There were also costs linked to certainty, i.e., whether the outcome costs were the same as those forecast at the beginning of projects. It would be important to engage key stakeholders as this project would need to try to identify baseline costs in each case.



10th July 2013

The following points were made in discussion:

- It was important to contextualise cost reduction in the nuclear industry. Cost reduction was a theme across the whole energy landscape. Access to finance was important, especially CfD's.
- The example was cited of a Middle East deal secured by the Koreans on the basis of a significant discount, thus providing greater cost certainty to the client. That was particularly important for new build.
- The importance of the levelised costs of electricity were emphasised, and using that as a basis for identifying cost pinch points. It would be useful to bring in USA experience to this work.
- The stability of the regulatory environment was identified as one of the most significant determinants of cost, and that it was important to have a strong, independent regulator, so the Office for Nuclear Regulation (ONR) had a key role. Other costs would include securing the confidence of investors, and the certainty of revenues.
- The Terms of Reference for this work had deliberately been cast wide to ensure all relevant factors were taken into account.
- This work would proceed and report back at the next NIC. The workstream was open to further members of the Council joining.

Action 7 Cost Reduction work to proceed and report back to NIC at next meeting.

Public Understanding of Nuclear Energy

The Chair introduced this item, which did not have a paper as it was in the early stages of development. Public understanding and perception impacts on all aspects of the nuclear industry and public trust and support could not be taken for granted.

The Fukushima incident was cited as a clear example of when nuclear energy was the subject of considerable public concern over safety. A balanced approach to this issue was important, involving industry and academia, as well as the Heath Protection Agency (as proposed in NIS) and organisations like the Science Media Centre, as well as reaching out to schools. The Sherpa meeting on the 12th of June identified this as one of the issues that needed to be addressed, and it had thus been added to the implementation proposals.

We were not starting from scratch with this issue – a lot of work had been done previously. The public perception of nuclear energy would have an impact on future developments, and it was therefore important to bring attention to the benefits in terms of security of supply, low carbon and the economic opportunities – jobs and growth. It was also important to recognise different levels of support, e.g., men, women, young, old, those with or without a



10th July 2013

university education etc, and the fact that they obtained their information from different sources (e.g., from I pad's to the daily broadsheets).

The next steps would be to agree membership of this working group, Terms of Reference and arrange its first meeting. Finally, it was emphasised that engagement with the public was a long-term challenge and activity – there were no quick fixes.

In discussion, the following points were made:

- Agreement that there were no quick fixes and that addressing this issue was fundamental to the nuclear industry. Suggested that it would be useful to have a paper on this subject for the November meeting.
- The work done to explain the situation behind Fukushima was commended, which presented a real challenge.
- It was emphasized once again that safety was a key issue for the industry, and a prominent concern with the public. The report by the Chief Nuclear Inspector, Dr Mike Weightman, about Fukushima was a reassuring contribution to the debate, and brought out the importance of transparency about operational matters.
- EDF would be opening more visitor centres – 7 or 8 – and those in use had attracted hundreds of visitors of all ages. This and similar examples of openness and transparency would be helpful in improving public understanding of nuclear energy.
- The use of new media as a means of communicating messages was reiterated. Such media, e.g., Facebook, could lead to debates that cannot be easily predicted which could transform public reactions, so it was vital to try to use them to ensure well informed public discussion.

Action 8 Paper on Public Understanding to be produced for next NIC meeting

Next Council meeting and AOB

The Chair invited an update on the work on nuclear R&D. The latest position on the Nuclear Innovation Research Office (NIRO) and the Nuclear Innovation Research & Development Board (NIRAB) was explained:

- On NIRO, a proposal was to be put to the NNL Board to establish the new organisation on the basis of proposals that had already been discussed with DECC, BIS and Government Office of Science. NNL would host NIRO and seek to resource it within existing budgets, and would be recruiting personnel for the new organisation. It was envisaged that industry would be able to second staff to NIRO, which would have a national role.
- NIRAB would take a long-term view of R&D needs, and establish links with various funding bodies. It would be supported by NIRO, e.g., developing business cases for



10th July 2013

funding proposals. Further work was required to establish NIRAB, which fell to DECC, BIS and the Government office of Science.

- Also stated that the National Nuclear Users Facility had been allocated £15m, and was based at existing centres of nuclear expertise and technical know-how (Dalton, Culham, etc). £5m had been used to date, which was for the purchase of a Higher Joule Beam Accelerator facility – the best of its kind anywhere. Also NNL was coordinating the UK's participation in the £15m Jules Horowitz Reactor facility, and would be organising relevant workshops with UK industry and academia.

Action 9 Secretariat to identify and communicate the date of the next NIC meeting

NIC Secretariat

July 2013