Eighth Annual Japan-UK Nuclear Dialogue
(Summary of Discussions)

Date: 27 November 2019

Venue: Department for Business, Energy and Industrial Strategy, London, UK

Co-Chairs:

Mr Stephen Speed (Director Nuclear, Department for Business, Energy and Industrial Strategy, UK)
Mr Koji Kano (Ambassador, Deputy Director General, Deputy Assistant Minister, Disarmament, Non-Proliferation and Science Department, Ministry of Foreign Affairs of Japan)

Background

The 'Japan-UK Framework on Civil Nuclear Energy Cooperation', which was annexed to the joint statement at the Japan-UK summit meeting in April 2012, states that Japan and the UK decided to launch an annual dialogue at senior level to strengthen bilateral cooperation across the full range of civil nuclear activities.

The eighth annual meeting was hosted by the Department for Business, Energy and Industrial Strategy in London, UK on 27 November 2019.

Session One: Nuclear Regulation and Safety

Regulators from the UK and Japan shared updates on regulation focus in their respective countries and their mutual exchanges over the past year. The Dialogue welcomed the upcoming secondment of a further regulator from the Japanese NRA to the UK ONR, continuing this successful ongoing programme of enhancing cooperation.

The UK side gave an overview on safety, security and safeguards, and showcased the ONR's work to make Sellafield 'safer sooner'. ONR shared their planning for safeguards following the UK's departure from current Euratom safeguards. The Japanese side gave an update on reactor restarts and wider regulatory reviews. The NRA also introduced their new nuclear oversight programme that will start in 2020.

Both sides shared their experience of training staff and discussed how they engage industry. It was noted that in both countries' regulators are responsible for regulating a wide range of nuclear facilities, from power stations under construction, to different types of facilities in decommissioning, and in the future will need to regulate geological disposal facilities. The opportunity to learn from each other was recognised, and the Dialogue was advised that regulators from both sides had found their collaboration valuable.

Session Two: Nuclear Research and Development

Both sides welcomed the success of the continuing UK-Japan joint research fund, which had resulted in several successful projects since its inception in 2014.

Japan provided an update on R&D related to nuclear in Japan including the roles of the various organisations involved. Plans for the decommissioning of Monju and for future fast reactor development were also described.

The UK described the various programmes of work they are funding in nuclear research, including in decommissioning, fuel cycle activity, and robotics. The UK also described work being funded on the development of SMRs and AMRs.

The concept of 'Grand Challenges' was introduced by the UK, as a way of making a step-change in the technology used in industry. The potential to work jointly on these through existing collaborations was discussed.

Although decommissioning posed many interesting challenges and was viewed as an exciting and fulfilling career for those work in the area, both sides recognised the difficulty of recruiting younger scientists and engineers into the industry. Both sides were pleased that a delegation from the UK Nuclear Graduates scheme would be visiting Japan later in the fiscal year.

The UK and Japan recognised the benefits of applying findings from R&D to industry. The UK described schemes to ensure that nuclear research was needs based, and Japan noted plans for similar activity.

Session Three: Public Communication

Discussion on public communication focused on public attitudes on nuclear energy in the UK (based on the recent public attitudes tracker survey), international engagement on nuclear issues, public engagement on geological disposal and public communication on decommissioning progress at TEPCO's Fukushima Dai-ichi Nuclear Power Station (NPS).

Both sides commented on the key role of scientific analysis when engaging publicly and the Dialogue recognised that public communication is integral and key. It was pleasing to see pupils from schools in Cumbria in the UK and Fukushima visiting each other's regions during 2019.

Session Four: Nuclear Energy Policy

Both sides presented on their respective nuclear energy policy. The UK showcased its recent legislation to achieve net zero emissions by 2050 while setting the context on climate change, decarbonisation and the role of nuclear within this. Japan presented on its 'NEXIP' (nuclear energy x innovation programme) nuclear innovation programme and shared updates on its nuclear fuel cycle programme as well as on wider energy policy.

Both sides welcomed the bilateral Nuclear Materials Dialogue that had started in the last year. The UK update on progress on new nuclear build as well as preparations for UK departure from Euratom. The UK and Japan welcomed exchange over the past year and mechanisms put in place to ensure there would be no interruption to UK-Japan nuclear cooperation following UK departure from Euratom.

Both sides recognised that COP26 Climate Change conference in the UK in 2020 would give opportunity to showcase energy policy and decarbonisation as well as the role of nuclear.

Session Five: Decommissioning and Environmental Remediation

There was recognition of the extensive amount of successful collaboration between the UK and Japan in this area, including the NDA and NDF, TEPCO and Sellafield, and the UKAEA's RACE facility with counterparts in Japan. The success of the collaboration between JAEA and UK counterparts in sharing decommissioning experience of the fast reactors at Dounreay and Monju was highlighted as a good outcome of MoU between JAEA and the NDA reported at the last dialogue.

Both sides provided an update of the decommissioning situation in their respective countries. There are a number of similar sites to be decommissioned in the UK and Japan, and the potential for knowledge sharing and collaboration to reduce the cost of this exercise was recognised. Items discussed included the importance of retaining information from operating sites as well as

emphasising the importance of organisational culture change when moving from operating to decommissioning.

Japan provided a detailed update on the current situation at TEPCO's Fukushima Dai-ichi NPS, including the detailed and transparent review process currently underway to decide how to deal with the ALPS treated water stored in the tanks at TEPCO's Fukushima Dai-ichi NPS, which will be repurified to remove radioactive nuclides except tritium and then will be diluted to meet the regulatory standards for discharge.

Concluding Remarks

The co-chairs, Mr Stephen Speed and Mr Koji Kano, expressed that the Eighth Annual UK-Japan Nuclear Dialogue had seen real progress in collaborative activities in many areas of the civil nuclear relationship and enabled important discussions to set the scene for further UK-Japan cooperation in the area of civil nuclear energy. The strong strategic partnership between both countries in the area of nuclear energy was noted. Through the Dialogue, both sides gained official, high-level recognition for the collaborative activities undertaken so far and delegates were able to identify opportunities for further cooperation.

The delegations reaffirmed that the UK and Japan share common values and see each other as natural partners to pursue further opportunities and deepen what is a historic relationship for the long term. The delegations agreed to hold the next Dialogue in Tokyo in fiscal year 2020 and to continue to promote the positive relationship.

Appendix: List of Acronyms

AMR – Advanced Modular Reactors
ALPS – Advanced Liquid Processing System
JAEA – Japan Atomic Energy Agency
NDA – Nuclear Decommissioning Authority (UK)
NDF – Nuclear Damage Compensation and Decommissioning Facilitation Corporation (Japan)
NRA – Nuclear Regulation Authority (Japan)
ONR – Office for Nuclear Regulation (UK)
R&D – research and development
SMR – Small Modular Reactors
TEPCO – Tokyo Electric Power Company (Japan)
UKAEA – United Kingdom Atomic Energy Authority