

The 28th N-20 JOINT STATEMENT

February 1st, 2024

The 28th edition of the N20 meeting gathering the leaders of the nuclear industry in France and Japan (*) took place on February 1st, 2024, in Tokyo, Japan.

The N20 members underlined the essential contribution of the nuclear energy to reach carbon neutrality and to ensure the security of energy supply with respect to the current energy crisis and welcomed the specification of the low-carbon value of nuclear energy in the official COP28 document for the first time in the history of the COP. They also highlighted the importance of sovereignty aspects in a context of worldwide geopolitical tensions.

Current priorities and issues for the nuclear fleet were presented. In Japan the efforts are deployed to restart the reactors that have undergone major safety upgrades. In France the reactors which were stopped following the discovery of Stress Corrosion Cracking issues have all restarted. The focus in the short term is to successfully perform the 4th periodical safety assessment of the 900 MW reactors. Both sides shared information on issues related to improving safety for long-term operation (LTO).

The members emphasized on the convergence between both countries on the closed fuel cycle policy as the current and future corner stone of the nuclear energy in France and in Japan. The successful Japan-France collaborations and its importance on reprocessing were highlighted. They shared information on fuel cycle developments and SFMOX reprocessing demonstration studies. Moreover, the members recognized that the existing geopolitical crisis have altered the balance between the different sources of uranium supply with potential consequences on nuclear fuel materials security of supply. The members are expecting that new capacities or projects will be launched to meet the increasing demand in the near future.

This edition of the N20 conference was also marked by the positive evolution of the global environment for new nuclear projects. The French nuclear industry is preparing the EPR/EPR2 industrial programs in France and abroad and is also developing the NUWARDTM Small Modular Reactor. The Japanese Government has presented a draft process plan aiming for the start of operation of innovative light water reactors in the 2030s, together with a policy of working on the development and construction of the next generation of innovative reactors. As a part of the policy, a company in Japan was selected to undertake the conceptual design of a demonstration fast reactor and the basic design, fabrication, and construction of a demonstration high-temperature gas-cooled reactor. The members also recognized the need for modernization related to regulations for new nuclear development.

The members presented the strategies for the Decommissioning and Dismantling. In particular, they shared the status of decommissioning of Fukushima Daiichi NPP, including the discharge of ALPS treated water, and exchanged opinions on French technologies and lessons

learned that could contribute to the decommissioning of Fukushima Daiichi NPP and other potential NPPs.

Both sides emphasized the challenges and the actions undertaken to maintain and develop the human resources and proposed to deepen discussion on this subject.

Both sides also shared the needs to reinforce the supply chain for the continued operation of existing nuclear facilities and for the future of nuclear energy.

Both sides are pursuing the development of advanced reactors. The successful collaboration between France and Japan on Fast Reactors was highlighted. Innovation on the fuel side was presented with the development of Accident Tolerant Fuel for enhanced safety of LWR and the development of the fuel for SMR and advanced reactors for improved nuclear economics. The members recognized the potentials for exploring R&D collaboration to maximize the values of nuclear technology considering synergies with renewable energy, as well as its sustainable and ubiquitous use and application. The members emphasized the need to maintain and develop R&D infrastructure and material testing reactors with international collaboration. In this area, the importance of the reactor JHR is well understood since it will probably be one of if not the last experimental reactors in function in FIDES II, OECD/NEA new framework for fuel and material R&D irradiation test, within the 2040s decade.

() The N20 members are CEA, EDF, Framatome and Orano in France and JAIF, JAEA, FEPC, TEPCO, Kansai EPCO, Chubu EPCO, JNFL, Toshiba ESS, Hitachi-GE Nuclear Energy, Mitsubishi Heavy Industries (MHI) in Japan.*