## **STATEMENT**

## by Mikhail Kondratenkov, Member of the Delegation of the Russian Federation at the Tenth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (Main Committee III)

Madam Chairman,

As a leading nuclear power, Russia has consistently advocated broad access to the benefits of peaceful nuclear energy for States parties to the NPT and the development of international cooperation in this area.

In 2020, the Russian nuclear industry celebrated its 75<sup>th</sup> anniversary, having reached high levels during these years. The share of nuclear generation in 2021 was about 20 percent of the total electricity generation in the country. An absolute record was set for electricity generation over the entire history of our nuclear power industry – over 222.4 billion kWh, which exceeded the 2020 figures of 215.7 billion kWh.

Currently, Russia has 37 nuclear power units with a total capacity of about 30 GW. In 2021 the sixth power unit of the Leningrad NPP with a VVER-1200 generation 3+ reactor, which meets all post-Fukushima requirements and has both active and passive safety systems, was commissioned.

Nuclear energy is a source of low-carbon electricity and is an essential tool for combating global climate change. Greenhouse gas emissions during the entire life cycle of NPPs are similar to those of hydro, wind, and solar generation and are almost 70 times lower than the values for coal-using TPPs.

The scale of the contribution made by nuclear power in the fight against climate change can hardly be overestimated. The existing nuclear power plants in the world provide savings in greenhouse gas emissions equivalent to the absorption capacity of all forests on the planet.

We have no doubt that modern nuclear energy is consistent with the principles of sustainable development and provides the economy with stable and clean energy. The highest safety standards enshrined, *inter alia*, in IAEA standards, ensure that no negative impact on human health and the environment is caused by nuclear facilities. We are already implementing specific projects to reduce emissions in various economic sectors using nuclear technology. The theme of the contribution made by nuclear energy to combat climate change was high on the agenda at the Glasgow Climate Conference in November 2021 and will be highlighted at the upcoming Sharm el-Sheikh Conference in Egypt in November 2022.

We believe that the future of nuclear energy is inextricably linked to a closed nuclear fuel cycle with "fast" reactor technologies being its integral part. This approach would expand the resource base and significantly reduce the accumulation of spent nuclear fuel waste, thereby achieving radiological equivalence to the natural uranium consumed by nuclear power.

Russia is the only country in the world that has accumulated significant experience in the commercial operation of fast neutron reactors with a focus on the development of closed fuel cycle technology. The first reactor became operative in the Soviet Union (Kazakh SSR) in 1973, the second in 1980, and the third in the Russian Federation in 2015. In February 2021, the core of the BN-800 fast reactor was one-third loaded with mixed plutonium-uranium fuel. The use of such fuel will be the first step in the transition to a two-component nuclear power system with a closed fuel cycle.

In June 2021, the construction of a nuclear power unit with the BREST-300 fast neutron reactor was launched in Siberia (Seversk, Tomsk

Region). First time in the world practice, a nuclear power plant with fast neutron reactors and on-site closed nuclear fuel cycle facilities will be built on the same site.

Our country is continuing a program to manufacture nuclear icebreakers using the new generation of RITM-200 low-power reactors. The lead icebreaker in the Arktika class (two reactors with a capacity of 175 MW), completed its sea trials in 2020, having reached the North Pole. In January 2022, the first serial icebreaker, the Sibir, was put into service; the second icebreaker, the Ural, is due to be commissioned in the same year. Two more icebreakers of the same series are under construction. We have launched serial production of RITM-200 reactors, which are also planned to be used in the construction of onshore nuclear power plants.

Our other priority is the development of small-scale nuclear energy. The world's only floating nuclear power plant with two low-power reactors is successfully operating in Chukotka. Four upgraded floating power units will also be built there. In Yakutia, a project is being implemented to build an onshore low-capacity nuclear power plant based on the RITM-200N reactor unit.

Russia remains the leader in the construction of nuclear power plants abroad. In these activities, we prioritize long-term and sustainable development objectives. In May 2021, the construction of unit 7 and unit 8 of the Tianwan NPP and unit 3 and unit 4 of the Xudapu NPP was launched in China. In June 2021, the construction of unit 5 and unit 6 of the Kudankulam NPP in India started. Also in early June 2021, the first unit of the Belarusian NPP was put into commercial operation, in December 2021 the physical launch at unit 2 was started. In July 2022, work began on pouring the "first concrete" into the foundation of the reactor building at the last unit 4 of the Akkuyu NPP in Turkey. The Akkuyu NPP is now officially the world's largest nuclear construction project with the simultaneous construction of four power units. In

2022, the first concrete was poured into the foundation plate of unit 1 of the El Dabaa NPP in Egypt. In total, out of 15 power units, the construction of which began in the world in 2021–2022, 10 are of Russian design. We continue building an NPP in Bangladesh and are working on licensing the construction of an NPP in Hungary.

We assist states in the application of nuclear technologies for non-energy purposes, in particular in the construction of national centers of nuclear science and technology (CNST). Bolivia has completed construction and installation work on the facilities of the 1st and 2nd stages of such a Center (a pre-clinical cyclotron-radiopharmacological complex and a multipurpose irradiation center); the "first concrete" of the research reactor building has been poured. Cooperation in the construction of the CNST is also underway with Rwanda, Serbia Vietnam, and Zambia.

Nuclear technologies, being one of the most science-intensive and breakthrough technologies, cause qualitative changes in the curriculum of educational institutions, in the training of highly qualified nuclear professionals and in the retraining of personnel, taking into account the high requirements of the IAEA. In the academic year 2021–2022 more than 2000 foreign students in nuclear and related fields of study, recruited with the assistance of ROSATOM from 65 countries of the world, are enrolled in Russian universities.

We fully support IAEA efforts to promote the widespread use of nuclear energy for peace, health and prosperity throughout the world.

Our participation in IAEA activities is comprehensive and constantly expanding. Russia is contributing financially, as well as through specific technical work and intellectual resources. The figures speak for themselves: our annual support to the Agency is about 15 million EUR.

Russia supports the IAEA policy to strengthen the development of nuclear energy. The implementation of the 2017 initiative to develop the nuclear energy infrastructure of newcomer countries is one of the largest components of

our interaction with the Agency aimed at achieving this goal. Another cycle of this work was completed in 2021. In 2017–2021, 50 training events were organized with over 720 foreign experts participating.

Russia is not only the initiator but also the leading sponsor of the IAEA International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), which has become a fully operational mechanism and a center of excellence in the comprehensive analysis of nuclear power systems. This intellectual platform enhances understanding in member states of the technical innovations and institutional features that ensure the sustainability of nuclear energy systems. 43 countries are involved in the INPRO project.

Russia remains one of the leaders in joint work with the IAEA to develop the Concept of assured supplies and multilateral approaches to nuclear fuel cycle services. The concept contributes to the goals of developing and expanding the geography of peaceful uses of nuclear energy. At the same time, it strengthens the nuclear non-proliferation regime, the objective of the NPT. More specifically, the International Uranium Enrichment Center, established jointly with Kazakhstan, continues to operate in Russia.

We highly appreciate the work of the IAEA Secretariat to stimulate cooperation between States in the Department of Technical Cooperation and the Department of Nuclear Sciences and Applications. Russia is a donor of the Technical Cooperation Fund. Together with the IAEA, we are implementing a project to remediate uranium legacy sites.

Russia's priorities include scientific research into and development of radiation technologies and the peaceful uses of nuclear energy in medicine, agriculture, industry and other key economic sectors. In 2021, Russia made a supplementary contribution to the Agency's ReNuAL+2 project to modernize its research laboratories in Seibersdorf (Austria).

In 2016, we joined the Agency's Programme of Action for Cancer Treatment. Over the past five years, 22 training events organized by the

Programme have been held in Russia, funded from Russian contributions and attended by more than 390 experts from 19 states members of the Agency. In 2019, it was decided to allocate about 900 thousand EUR in 2020–2023 to continue the Program.

We have been consistently strengthening our national capacity to ensure the safe use of nuclear energy in extensive collaboration with the IAEA. Russia is party to the Convention on Nuclear Safety, the Convention on Early Notification of a Nuclear Accident and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, as well as to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. In 2005 Russia acceded to the 1963 Vienna Convention on Civil Liability for Nuclear Damage.

The development of peaceful uses of nuclear energy is impossible without an adequate level of nuclear safety. The Russian Federation supports the strengthening of nuclear safety around the world, while respecting the fundamental principle, according to which states themselves should bear sole responsibility for ensuring nuclear safety on their territories and determine its optimal parameters at their discretion.

We support the universalization of key international legal instruments in this area, in particular the Convention on the Physical Protection of Nuclear Material and the 2005 Amendment.

We are convinced that the IAEA should play a central role in international cooperation on physical nuclear security since it is the most representative and technically competent international organization in this field.

Madam Chairman,

In the context of nuclear and physical nuclear security, we would like to draw attention to the emergency situation at the Zaporozhye nuclear power plant. On 5–7 August, Ukraine committed several criminal acts in the form of artillery and rocket attacks on the Zaporozhye NPP. As a result, a fire broke out

on the territory of the plant and the high-voltage power line and pipelines were damaged, which could lead to a large-scale disaster. This left more than 10 thousand people without electricity and water supply.

The Russian Federation has evidence confirming that the Kiev regime is the organizer and executor of these crimes. We are ready to share them with the international community. We call on the UN and relevant international organizations, as well as states that have influence over Kiev, to compel Ukraine to refrain from such criminal actions.

## Madam Chairman,

Nuclear technology is a reliable and proven tool for achieving the UN sustainable development goals. International cooperation is crucial to the success in achieving this goal and should be promoted and enhanced in every way possible. We intend to continue contributing to sustainable development and the geographic expansion of peaceful uses of nuclear energy while strengthening the nuclear non-proliferation regime.

Thank you.