

**IAEA Board of Governors Meeting
March 6-10, 2023**

Agenda Item 4

**Strengthening the Agency's Activities Related to
Nuclear Science, Technology, and Applications:
Nuclear Technology Review 2023**

U.S. Statement as Delivered by Ambassador Laura S.H. Holgate

Chair,

The United States associates itself with the joint statement made by the United Kingdom and makes the following statements in its national capacity.

Chair,

The United States thanks the Secretariat for this year's report summarizing important developments in the field of nuclear energy, science, and technology. We emphasize the valuable role that nuclear science plays in addressing global challenges and helping to achieve the UN Sustainable Development Goals. I would like to commend the Director General, the Secretariat, the Department of Nuclear Sciences

and Applications, the Department of Nuclear Energy, and the Department of Technical Cooperation for their hard work promoting the widespread use of nuclear science for peaceful purposes. We especially appreciate the Director General's cross-cutting initiatives on ZODIAC, Rays of Hope, NUTEC Plastics, and the SMR platform for their one-house approach to bringing together relevant expertise from across the Agency.

Chair,

The United States would like to recognize that this year marks the 70th anniversary of President Eisenhower's "Atoms for Peace" speech, which noted the importance of civilian nuclear technologies for agriculture, medicine, and power, and envisioned an atomic energy agency that could serve the peaceful pursuits of humankind.

The IAEA continues to realize that vision with research and capacity building programs that help Member States harness the peaceful power of the atom to improve the diagnosis and treatment of cancer, develop disease and drought-resistant crops, control insect

populations that spread deadly diseases, and enhance the early warning and monitoring of zoonotic diseases.

Since 2015, the United States has contributed over \$400 million to support the IAEA's peaceful uses activities. Our history of strong financial and in-kind support to the IAEA's peaceful uses programs demonstrates the U.S. commitment to expanding access to the benefits of peaceful uses pursuant to Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons. It also underscores our deep appreciation that the IAEA continues to be an indispensable partner, delivering assistance improving the lives of people around the world. We will continue to look for ways to enhance our partnerships so that the safe, secure, and peaceful application of nuclear science and technology bring us closer to achieving the Sustainable Development Goals. When possible, we will also support the IAEA's provision of emergency assistance to Member States. For example, the United States recently provided extrabudgetary Peaceful Uses Initiative funds

for portable medical x-ray machines in Türkiye as part of the IAEA's initial response to the tragic earthquakes in Türkiye and Syria.

Chair,

The United States recognizes the important role that nuclear power plays in providing zero-carbon, reliable electricity in a way that promotes sustainable development and energy security while mitigating climate change. In the United States, this year has seen important advancements in our nuclear energy progress. Yesterday, the Vogtle nuclear power plant's third reactor in the state of Georgia achieved its first criticality and is expected to enter into commercial service in May or June. This is the first new nuclear power plant constructed in the United States in three decades.

U.S. advanced reactor companies made significant strides toward deploying their reactors in the United States. In addition, the Diablo Canyon nuclear power plant in California received credits worth up to

\$1 billion from the federal government to help extend the plant's lifetime past 2025, reversing a prior decision to close the plant.

In the area of fusion, in 2022, scientists at Lawrence Livermore National Laboratory conducted the first controlled fusion experiment in history that achieved fusion ignition.

The United States was pleased to host the International Ministerial Conference on Nuclear Power in the 21st Century in Washington, D.C., which emphasized many of the key themes found in this year's Nuclear Technology Review: a growing global interest in nuclear power as a zero-carbon, reliable electricity source; the mitigating impact of nuclear power on climate change; and the potential contribution to non-power applications by advanced reactor designs, especially small modular reactors and microreactors.

With this context in mind, we emphasize our support, including through significant Peaceful Uses Initiative contributions, for the Agency's activities to assist Member States seeking to include nuclear

power in their national energy mix. We further emphasize the critical importance of high standards of nuclear safety and security together with rigorous and effective nonproliferation measures in implementing civilian nuclear programs. Effective capacity building programs are necessary to achieve these standards and this year, we are pleased to support the IAEA's new Lise Meitner Programme by funding technical visits for the first two initial cohorts of women to U.S. institutions.

Chair,

The nuclear applications laboratories at Seibersdorf play a critical role in demonstrating, developing, testing, and scaling technology to meet the needs of IAEA Member States. We are pleased to join with others in announcing a new, extrabudgetary contribution for the project to modernize these laboratories, known as "ReNuAL 2," which will increase the IAEA's capacity to respond to Member State needs in many of the areas addressed in the Nuclear Technology Review. Our funding will be used for the construction of new greenhouse facilities

that are essential for tackling the growing challenges related to food safety, food security, and climate change.

The United States is also pleased to highlight a workshop on “Accelerating the Adoption of Electron Beam and X-ray Technologies for Sustainable Economic Prosperity in Africa” that we are hosting this week in Rabat, in partnership with the Moroccan National Center for Energy and Nuclear Science and Technology. This workshop will help inform local and regional decision makers interested in machine-based technologies for food irradiation, one of the trending developments highlighted in the Nuclear Technology Review to improve food safety, maintain food quality, and extend food shelf life.

Chair,

With these comments, the United States is pleased to take note of the Nuclear Technology Review for 2023.

Thank you.