

Statement by Dr Ajit Kumar Mohanty, Chairman, Atomic Energy Commission and Secretary, Department of Atomic Energy at the 67th General Conference of IAEA

Madam President, Excellencies, Ladies & Gentlemen,

Namaste and Good morning!

It is an honour to represent the Government of India at this August forum. On behalf of the Government of India, I warmly greet the International Atomic Energy Agency and its Member States.

Madam President,

- 2. Please accept our heartiest congratulations on your election to the post of the President of the sixty-seventh session of the General Conference of the IAEA. I assure you of India's full support and cooperation.
- 3. Keeping in mind the pivotal role of the IAEA in global nuclear cooperation, I take this opportunity to reiterate India's strong support for the Agency in its efforts to promote peaceful uses of atomic energy.
- 4. We also warmly welcome the newly elected members of the Agency. We congratulate Mr. Rafael Mariano Grossi for his re-election as DG of the IAEA. We wish him all the best for his new tenure.
- 5. Our close exchanges and productive engagements mark India's longstanding partnership with the IAEA on a range of nuclear domains, including nuclear energy, nuclear sciences and applications, nuclear safety and security, nuclear safeguards, and technical cooperation.

- 6. India and the Agency share overlapping interests in promoting nuclear science applications in radiopharmaceuticals, cancer care, climate change, smart agriculture, food security, and nutrition.
- 7. India fully supports the IAEA's efforts to mitigate the global cancer burden through the Agency's 'Rays of Hope' programme. It is a matter of honour that the Tata Memorial Centre, along with its nine satellite centres, is becoming an IAEA Collaborating Centre. It will serve as an Anchor Centre under the Rays of Hope initiative.
- 8. Continuing the tradition of harmonious engagements, in May this year, the Indian delegation led by the Chairman, Atomic Energy Regulatory Board (AERB), participated in the Joint 8th and 9th Review Meeting (RM) of Contracting Parties (CPs) of the Convention on Nuclear Safety (CNS). All challenges and suggestions that emanated from the 7th review meeting were closed, and no new challenge was identified for India.

Madam President,

With great pride, I would like to mention some of the achievements of the Department of Atomic Energy, Government of India, since we met in September 2022.

9. **Nuclear Power Corporation of India Limited (NPCIL)** has been setting records in extended continuous power plant operations and maintaining excellent safety records. Some of its units have operated continuously for more than 365 days on 42 occasions and more than 700 days on 5 occasions. One remarkable achievement is that Unit-3 at Kakrapar in the Gujarat state of India recently commenced commercial operation; it's the first-of-its-kind 700 MWe indigenous Pressurised Heavy Water Reactor (PHWR).

- 10. **Bhabha Atomic Research Centre (BARC)** has uncovered beneficial applications of radioisotopes and radiation in agriculture, medicine, and industry through scientific research. India's Low Energy High-Intensity Proton Accelerator (LEHIPA) at BARC has reached the target energy of 20 MeV, making it the highest-intensity proton accelerator developed in the country. All significant sub-systems of LEHIPA have been designed indigenously by DAE scientists and engineers. This development has substantial applications in cancer care.
- 11. BARC has established a dedicated state-of-the-art target manufacturing facility for an uninterrupted supply of indigenous Plate Fuel targets to produce the medical grade 99Tc.
- 12. Fission Molybdenum-99 Plant (FMP) of the **Board of Radiation and Isotope Technology (BRIT)** was dedicated to the nation by our Honourable Prime Minister, Shri Narendra Modi, on 11th May 2023. Molybdenum-99 produced at FMP can fulfil the entire country's demand and is also available for export to neighbouring countries.
- 13. **Heavy Water Board (HWB)**, the largest global producer of heavy water, has been exporting Heavy Water to several countries for non-power applications. Heavy Water Board has successfully produced medical-grade water enriched with oxygen-18, which is being used for medical purposes.

Madam President,

- 14. **Tata Institute of Fundamental Research (TIFR)** successfully tested the flight of the Space Exploration Capsule of M/s Halo Space (Spain) from the TIFR Balloon Facility, Hyderabad, on 7th December 2022.
- 15. **Raja Ramanna Centre for Advanced Technology (RRCAT)** continued to operate Synchrotron Radiation sources Indus-1 and Indus-2 as a National Facility in round-the-clock mode, with total beam availability of

6850 hrs in Indus-1 and 5500 hrs in Indus-2, respectively. Three RRCAT-made High Beta 650 MHz cavities have been successfully tested and integrated into the PIP-II project's first prototype cryomodule at Fermilab, USA.

Madam President,

- 16. **Variable Energy Cyclotron Centre (VECC)** has produced a PET radiopharmaceutical, Copper-64-Chloride, from a solid Zinc-68 target using a 28 MeV @60 μ A proton beam from the 30 MeV Medical Cyclotron Facility at VECC, Kolkata (jointly with BRIT). Copper-64-Chloride is a theranostic radiopharmaceutical used for therapy and also for the diagnosis of cancer.
- 17. **Nuclear Fuel Complex (NFC)** has indigenously developed a new state-of-the-art Automated Machining Centre, contributing to the Government of India's initiative of 'AatmaNirbharBharat'. It is an indigenous development of 360 kW Vacuum Arc Re-melting (VAR) furnace for producing 280 mm diameter primary melted Zircaloy ingot with 100% indigenously developed mechanical assemblies.
- 18. **Indian Rare Earths Limited (IREL)** developed a facility for the production of Rare Earth Permanent Magnets (Samarium-Cobalt) in the BARC Campus in Vizag, and the same was dedicated to the nation on the 25th anniversary of the 'National Technology Day' on 11th May 2023.
- 19. **Electronic Corporation of India Ltd. (ECIL)**, for the first time, indigenously developed the Calorimeter, which will serve the requirements of all the country's nuclear reprocessing and waste disposal facilities.
- 20. **Institute for Plasma Research (IPR)** demonstrated 1 MW RF power at 170 GHz for 1000 seconds at the ITER-India Gyrotron Test Facility, as part of its collaboration with ITER for development of Fusion Technologies. The

Institute for Plasma Research has successfully installed a Liquid-Nitrogen Cooled Cryopump on the SST-1 Tokamak.

Madam President,

- 21. A few days ago, India hosted the G20 Summit, where energy security, access, affordability, and transition were the essential considerations. Under India's Presidency, the countries that opted to use civil nuclear energy reaffirmed their role in providing clean energy. These countries will now collaborate in the research, innovation, development, and deployment of civil nuclear technologies, including advanced and Small Modular Reactors (SMRs). It will help build resilient nuclear supply chains, promote responsible nuclear decommissioning and radioactive waste and spent fuel management, and share knowledge and best practices.
- 22. India firmly believes that ensuring the safety and security of nuclear and radiological materials is a shared responsibility of all Member States. India will continue to support the Agency in its efforts to provide a robust, sustainable, and visible global nuclear safety and security framework.
- 23. We thank the city of Vienna, the people, and the government of Austria for hosting the General Conference of the IAEA. India remains committed to the peaceful use of nuclear energy, both on the research and application fronts. We wish the 67th General Conference a grand success.

Thank you very much.