

Department of Atomic Energy

Nuclear Energy: a 'Clean' Energy option

The 6th National Conference on Nuclear Energy was organized by ASSOCHAM in New Delhi today. The theme of the conference was "Nuclear Energy: a 'Clean' Energy option".

The Conference was attended by Dr. Jitendra Singh, Minister of State, Department of Atomic Energy & Development of Northern Eastern Region (I/C), PMO, Personnel, Public Grievances & Pensions, Department of Space, Government of India, Mr. Rajkumar Dhoot, (MP), Immediate Past President, ASSOCHAM, Dr. R.K. Sinha, Chairman, Atomic Energy Commission and Secretary, Department of Atomic Energy, Government of India, Mr. Francois Richier, Ambassador Extraordinary and Plenipotentiary of France to India, Mr. Erwan Hinault, Chairman & Managing Director, AREVA India and Mr. Pawan Kumar Agrawal, President, Corporate Finance, Yes Bank among others.

Speaking on the occasion, Dr. Jitendra Singh said that this conference is unique in many ways as this year happens to be the year of diamond jubilee celebrations of the setting up of Bhabha Atomic Research Centre (BARC) and we need to rededicate ourselves to the values of peaceful use of nuclear energy. We will be remembering the legacy of Dr. Homi Jehangir Bhabha and his initiatives which he took 60 years ago by setting up a centre of atomic energy in India, he added. Our nuclear policy is in line with the principles of peace and non-violence of Mahatma Gandhi as we use nuclear energy for peaceful purposes. He said that India is going through one of the best times as the Hon'ble Prime Minister Shri Narendra Modi's visits to various countries have helped us in civil nuclear cooperation with these countries.

The Minister said that the Department of Atomic Energy under the vision of Hon'ble Prime Minister has eminent prospects in future. During the Prime Minister's visit to Canada, it has been agreed that Canada will supply 3000 metric tonnes of uranium over the next five years to India. Similarly, during the Prime Minister's visit to France, the agreement signed with AREVA is in line with the vision for "Make in India".

Speaking on the potential hazards of nuclear energy as largely perceived, the Minister said that the awareness programmes needs to be organised to address the myths about the use of nuclear energy. He said that various studies have been conducted to assess these effects which show no extra risk due to usage of nuclear energy for the people living in the vicinity of nuclear plants. The nuclear energy is more environment friendly and climate friendly as compared to other sources of energy, so it can be used for generation of power to meet the growing demand of energy.

Shri R.K. Sinha, Chairman, Atomic Energy Commission said that nuclear energy is the clean and green source of energy and it is a good option for energy if per capita consumption of power in India has to be increased. This way we can leave a clean planet for the generation to come and fight the challenge of global warming. He said that various myths related to nuclear energy need to be addressed for the acceptance of nuclear energy as an option. He also said that financial

aspects related to the generation of nuclear power also need to be addressed by cooperation in the field of research and development. The nuclear energy production will be cost competitive and will help generating more employment in the country, he explained.

Mr. Nadir Patel, High Commissioner of Canada in India said that during the recent visit of Prime Minister, Shri Narendra Modi to Canada, nuclear energy was an important agenda and the civil nuclear cooperation between the two countries shows the significance of mutual trust between the two countries.

The addresses by the dignitaries were followed by an interactive session with the audience. During the interactive session, MoS, Dr Jitendra Singh said that the share of nuclear energy in total power generation in India will increase in future. India has rich reservoirs of thorium and India can take lead in this area in the future.

A Panel discussion on various issues such as contribution of nuclear energy to the decarbonisation of power sector, nuclear energy expansion & “Make in India” and Climate change & the future of nuclear energy was also held at the conference.

Mission of International Atomic Energy Agency (IAEA)

Mission of International Atomic Energy Agency (IAEA) to review the Indian’s regulatory framework for nuclear safety was concluded today. The IRRS Team has concluded that the Indian nuclear regulatory body, the Atomic Energy Regulatory Board (AERB) is an experienced, knowledgeable and dedicated regulatory body for the protection of the public and environment.

The IRRS peer review mission for India took place from March 16-27, 2015 at the request of the Government of India. The Mission looked at the regulatory framework of Atomic Energy Regulatory Board (AERB) for Nuclear Power Plants and Projects.

The IRRS mission, coordinated by the IAEA, was led by Mr Ramzi Jammal, Executive Vice-President and Chief Regulatory Officer of the Canadian Nuclear Safety Commission (CNSC). The team comprised 16 experts from the nuclear regulatory bodies of Bulgaria, Canada, Czech Republic, Finland, Hungary, Israel, Netherland, United Kingdom, United States of America, and the IAEA itself. The peer review was carried out by comparison against IAEA safety standards as the international benchmark for safety. The Mission was preceded by an extensive self-assessment exercise by AERB extending over a year. The Mission provided AERB with an opportunity for a quality exchange of information with international regulatory experts and further enhance the regulatory framework and processes in India.

The mission commenced with an entry meeting of IRRS team with the officials of AERB, Bhabha Atomic Research Centre (BARC) and Department of Atomic Energy (DAE) on March 16, 2015. Over the next two weeks, the Mission went about information gathering, review and verification through interactions with the officials and senior management of AERB as well as examination of documents. The Mission also interacted with the Chiefs of Atomic Energy

Commission, BARC and the Nuclear Power Corporation of India Limited. A few team Members witnessed AERB's regulatory inspection activities to Kakrapar Atomic Power Station to evaluate the inspection practices of AERB.

The IRRS team acknowledged that AERB continues to enhance its regulatory programme to face the current and future challenges in regulatory nuclear safety, such as reinforcing the safety of existing nuclear facilities, monitoring ageing and decommissioning, as well as providing oversight of the construction, commissioning and operation of new nuclear power plants.

The team identified several good practices related to competence of the personnel, the recruitment and training of personnel, operating experiencing feedback, research and development infrastructure related to regulatory activities and the use of systematic database for tracking the recommendations from emergency exercises.

The team identified a few areas of the Indian nuclear safety regulatory framework in need of improvement, including the following:

- Promulgation of the established policies and strategy for safety and the strategies for radioactive waste management as statements of the government's intent.
- Embedding in law the regulatory independence of AERB.
- Review of implementation of policy and arrangements to ensure maintenance of independence in the performance of regulatory functions.
- Enhancing then frequency of routine on-site inspections at NPPs to allow for additional independent verification and
- Development and implementation of its own internal emergency arrangements including detailed procedures to fulfil its roles related to emergency response.

Some of these recommendations/suggestions relate to formalizing the good practices into formal written down procedures and to strengthen internal management processes. AERB has accepted these as an opportunity to further enhance the regulatory framework and processes and development of a detailed action plan by AERB is underway to address the same.

The final report of the mission will be submitted by IAEA to the Government of India in about three months.
