STATEMENT BY MR. DIGVIJAY SINGH, MINISTER OF STATE FOR EXTERNAL AFFAIRS ON AGENDA ITEM 14: REPORT OF THE INTERNATIONAL ATOMIC ENERGY AGENCY IN THE GENERAL ASSEMBLY ON NOVEMBER 11, 2002

Mr. President,

At the outset, let me compliment the International Atomic Energy Agency (Agency) on completion of 45 years as a unique multidisciplinary international organisation functioning to fulfill its mandate to the satisfaction of all its stake holders. The Agency is a unique professional body in the area of Nuclear Science and Technology with the ability and wherewithal to provide solutions to various issues concerning all of us. The Agency has not shied away from adding new dimensions to its activities, while maintaining a careful balance among all its statutory activities.

Mr. President,

The World Summit on Sustainable Development concluded recently. The threat to global climate due to increasing carbon dioxide emission is even more evident. Notwithstanding the important role of renewable and other clean energy technologies, given the magnitude of this problem, there can be no doubt that nuclear power is an inevitable option at the present state of development of advanced energy technologies which can meet the development aspirations of a large fraction of world population, while at the same time conforming to the criteria of sustainability. It is ironic that in spite of its large energy potential with the capability to meet the worldwide energy needs sustainably and without any significant real environmental impact, the unfounded misconceptions about nuclear energy still dominate and have become impediments to sustainable development.

At the present juncture, one sees nuclear power simultaneously witnessing stagnation, renaissance and growth in different parts of the world. During the 90s, the gross generation of nuclear electricity in Asia has grown by 63.7% and the global nuclear energy availability has increased from 73% to over 82%, which is equivalent to adding 33 Giga Watts (e) of new generating capacity. There is growing activity for life extension of existing Nuclear Power Plants. This exercise is equivalent to building new reactors in those countries. An integrated view of technology, safety, safeguards and the newly emerging scenario with respect to nuclear terrorism is however necessary to find holistic answers which would eliminate the barriers to large scale development of nuclear

power in a sustainable manner.

Recognizing the important role of nuclear power in meeting the long term energy needs, India has accorded high priority to self reliant development of nuclear power in the country. This has enabled a strong indigenous capability in all aspects of nuclear fuel cycle. Presently, construction for 8 more reactors is in progress, which is the largest number of reactors currently under construction in any country. These units include six Pressurised Heavy Water Reactors of indigenous design and two 1000 MWe VVER units being set up in cooperation with the Russian Federation. Construction of all projects is progressing ahead of their respective schedules.

Our 14 operating nuclear power reactors together have registered an impressive 85% overall average annual capacity factor during the last year and at the same time, have maintained an excellent safety record. In line with keeping our commitments to the preservation of environment, most of the operating power plants have also obtained Environment Management System (EMS) certification as per ISO 14001.

We would reach a total nuclear capacity of 6680 MWe by the year 2008 and intend to achieve 10,000 MWe by the year 2012 to reach the objective of 20,000 MWe by the year 2020. In order to achieve this, given the nuclear resource profile available within the country, we have also done considerable work on the design and development of Plutonium-Uranium oxide fuelled, 500 MWe Prototype Fast Breeder Reactor at Kalpakkam. While the pre-project activities for construction of this reactor are already in progress, we would soon launch the main project.

The expansion of our nuclear power programme is being suitably backed up with the opening up of two new Uranium mines in the State of Jharkhand in India. We have also undertaken pre-project activities for the commencement of Uranium mining at three more sites. We have also undertaken significant steps including, reduction of specific energy consumption in heavy water production and compression of the construction schedule to make nuclear power even more competitive. The Indian track record on export controls as well as fulfillment of its international obligations has been exemplary to the extent that India has, in fact, been described as a 'classic non-proliferator'.

While the Indian programme is designed to cater to the long term energy needs of the country, the recent awareness of the impact of carbon dioxide emissions on global climate has necessitated expeditious large scale deployment of nuclear power in India. External additionalities in the nuclear power sector, for which there exists a large market in India could help this process further. However, our efforts to accelerate the development of nuclear power as a sustainable means of producing clean energy necessary for meeting development aspirations of one sixth of humanity are faced with restrictive export policies of certain countries. It is common knowledge that India's

nuclear programme is *sui generis* with indigenous and comprehensive capability and therefore, any proliferation concern on account of external supplies to India is unfounded. Linking external additionalities to nuclear power development in India with such irrelevant and unfounded concerns is only going to increase the dependence on fossil fuel with associated damages to global environment.

Our atomic energy programme has accorded prime position to safety in all its activities and has kept up with the needs accompanied with the expansion of nuclear power programme as well as with the utilisation of nuclear technologies for research, health, agricultural, and industrial purposes. We have gained close to 200 reactor-years of operating experience with good track record of safety of the operating personnel, public and the environment. Needless to say that safety cannot be divorced from technology. However, it is unfortunate that in practice, technologies continued to be denied even for systems important to safety.

Mr. President,

IAEA's International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) is the most appropriate and timely activity to overcome barriers to growth of nuclear power for sustainable development of the world. We are convinced that such technological solutions are the need of the hour and provide superior, cost effective and comprehensive alternatives to the current segmental approach of dealing with technology, safety and safeguards separately. We have taken active part in this programme being run by the Agency on extra budgetary resources and have also provided cost free experts. We feel that the time has come for the Agency to take up INPRO programme through its regular budget.

We are glad that the Agency promptly responded to the needs of Nuclear Security following the tragic events of September 11, 2001 including setting up of an Advisory group on Nuclear Security. We should eliminate any possibility of terrorists exploiting the potential for using nuclear material and radioactive sources, particularly for blackmail. Though the prime responsibility for the security and safety of nuclear and other radioactive materials and nuclear facilities is and must rest with the States themselves, the Agency's additional activities can contribute meaningfully towards protection against nuclear terrorism. In the process, we should also ensure that it does not add to the sense of undue apprehension that exists in many quarters about the safety of use of nuclear energy for peaceful purposes.

India has acceded to the Convention on Physical Protection of Nuclear Material. This reinforces India's commitment to international instruments against Terrorism in general and Nuclear Terrorism in particular. In India, for more than four decades, we have established strict physical protection measures for nuclear material during its use, storage and transport. A multidisciplinary expert group at the apex level ensures that appropriate measures are adhered

to in this regard. These are being suitably upgraded with technological advancement. Besides this, an internal Physical Protection Advisory Service also exists. We have specially designed Human Resource Development programme to train manpower at various levels for this purpose.

The orphaned sources around many countries of the world have been a cause of concern. We have collaborated with the Agency to provide indigenously developed equipment including an Aerial Gamma Survey System (AGSS), and services of our experts for conducting ground and aerial survey for the search of orphaned sources in Georgia.

We are glad that Agency is rightly seized with the issue of knowledge management. Concern about nuclear knowledge in some parts of the world is an important challenge. Nuclear knowledge pool in India is very large and is growing in tune with the rapid growth of nuclear energy programme in the country. One of the challenges that all of us engaged in nuclear technology development must address is to drive knowledge based holistic approach to the entire gamut of technology-society interface. Further, the linkage between the society, the industry and the national programme must be visible to the students right at the stage of their higher education so that they recognise that there are challenges that need solutions and are motivated to solve them. We need to distinguish knowledge transfer from technology transfer, which has obvious constraints arising out of commercial connotation. Knowledge on the other hand is enhanced by sharing with worthy scholars who can sustain the process and also with those who can translate it to finding new solutions of societal interests.

Mr. President,

I must emphasise that any technology will have its associated problems, but the solutions to such problems also lie in technology. There are several examples in the evolution of civilization where technology has enabled enhancement of quality of life. In the process some new issues of concern arose; however, such issues were satisfactorily resolved through further application of technology. We have seen this in the context of energy, transportation, material processing, food, human health and many other areas of human endeavor. Technological empowerment is thus the need of the hour. Continuity in nuclear knowledge and empowerment in nuclear technology for global peace and prosperity is our collective responsibility and we can achieve it through the unique organization, the IAEA.

Thank you, Mr. President.