In the Name of God, the Compassionate, the Merciful

Iran's Nuclear Policy (Peaceful, transparent, Independent)

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Excellencies, Ladies and gentlemen, I'm very pleased to address such a scholarly gathering as the representative of the Islamic republic of Iran, a country which is home to one of the oldest civilizations and the caller of the dialogue among civilizations and promoter of the peace cause. Our world, especially the Middle East, is facing a very crucial and precarious time where show of force and domineering stance have replaced logic and rationalism. Let's hope that at the end truth and justice will prevail.

The Islamic Republic of Iran which took its first serious step in this field in the mid 1950s by establishing the Atomic Center of Tehran University has based its nuclear development program on peaceful use of this advanced technology.

My country's nuclear development plan has been subject to variations from time to time, but because of the striking impact of nuclear technology on scientific, economic and social indicators and sustainable development in general, our government and people are determined to open their way through the tortuous path of the peaceful use of nuclear technology despite all difficulties and imposed restrictions.

First, I would like to inform the honorable delegates of the reasons and needs for Iran's peaceful nuclear development.

Our prime priority of nuclear program is generation of nuclear electricity. Due to the rapid socio-economic development of Iran during the past three decades, our strategy for use of fossil resources has been affected by two restrictive elements. On the one hand, rising living standards and improvement of economic indicators have prompted an increase in the demand for energy in domestic and industrial sectors and on the other hand, our national economy is dependent on oil revenues. To dispose of these two contradictory and restrictive elements, our country needs to develop a longterm strategy to reverse the trend of unrestrained use of fossil resources.

Here, I would like to give the honourable delegates an overview of energy situation in my country.

At present, the Islamic Republic of Iran with a population of around 65 million people has an equivalent amount of 932.9 million barrels of crude oil for supply of its primary energy. The supply of primary energy of our country has registered an average growth rate of 6.03% since 1977 and energy consumption rate has increased from an equivalent amount of 180.9 million to 661.7 million barrels of crude oil in 2001 at an annual average growth rate of 5.8%. During the same period the electricity production rate has increased from 19847 million KWh in 1977 to 130082.3 million KWh in 2001, registering an annual average growth rate of 8.52%. It is worth noting, that the consumption of energy for electricity generation in our fossil power plants has increased from an amount of 29.6 million barrels of crude oil in 1977 to 225.7 million barrels in 2001, registering a consumption growth rate of 8.8%,which is clearly a very high score.

Hence, we are ought to seek a remedy for this situation. The Islamic Republic of Iran can not merely rely on the provision of its energy from fossil fuels just on the ground of possession of large fossil resources for the following considerations:

First, these resources are limited and belong to all subsequent generations and unrestrained use of them is not prudent.

Second, the utilization of these resources in processing industries such as petrochemicals will generate much greater added value.

Third, local use of these resources as fuel will drastically affect our foreign exchange earnings from export of crude oil and natural gas. It's worth mentioning that the continued use of energy in its present form in our country is bound to turn our country into an importer of crude oil and some of its by-products in the coming decades.

Fourth, our government is paying considerable indirect subsidies on local fuel consumption which entails heavy costs for the government in a way that the current pricing mechanism does not even meet the production and distribution costs of these fuel products. And the final and very important consideration is environmental issues which are now of concern to the entire international community and all countries are encouraged to observe the environmental standards to ensure the survival of the earth and its environment in line with the international initiatives which are now in force.

The aforementioned considerations have made the reliance of our country on fossil fuels for energy generation unreasonable and unaffordable and have also made the use of new technologies including the nuclear technology more competitive. In order to determine the optimal shares of different types of power plants in the supply of electrical energy needs of the country within the next 20 years, we conducted a survey following the WASP model; a widely known model for optimization of energy supply. The results of the survery indicate that by the year 2020 the share of nuclear power plants in the supply of energy in the various growth scenarios of low, medium and high will be respectively 4000, 7000 and 11000 megawatt.

Based on the results of this survey, the Islamic Republic of Iran has chosen the medium scenario namely the production of 6000 megawatt nuclear electricity in addition to the 1000 megawatt Bushehr power plant which is now under construction as the backone of its plan for development of nuclear power plants.

What is noteworthy at this point is Iran's decision and determination to diversify its range of nuclear power plants and at the same time focus on those types of plants which can be designed and built with the help of nuclear knowledge which has been developed in our country.

We plan to utilize other types of power plants including HWR and specially CANDU in addition to LWR which is now under construction in Bushehr.

The use of CANDU reactors which is more amenable to indigenous development will enable us to use natural uranium recovered from local resources for production of nuclear fuel.

Without a doubt, the decision of the Islamic Republic of Iran to develop the technology of HWR power plants and research reactors will encourage us either to use the knowledge of countries possessing this technology or develop this knowledge by relying on our own local capabilities and specialized human resources. It goes without saying that the continuous surveillance and inspection of IAEA will dispel any doubts cast by certain countries over such activities.

If the plan for construction of nuclear power plants and generation of 7000 megawatt electricity is to be materialized by 2020, we will annually save an equivalent amount of 190 million barrels of crude oil based on the 60% EAF (energy availability factor). The economic value of such savings is estimated to be over 5 billion US dollars per year. Besides, it will also prevent the production and release

into the atmosphere of over 157000 tons of carbon dioxide, 1150 tons of suspending particles in the air, 130 tons of sulphur and 50 tons of nitrous oxide. It is evident that with any increase of EAF, the economic and environmental advantages of nuclear power plants would be greater.

The second objective in the nuclear development plan of Iran is the attainment of self-sufficiency in the provision of nuclear fuel. Decision to build different types of nuclear power plants obliges us to work for the production of different types of nuclear fuels, of course, all under the surveillance of IAEA safeguards. To be able to produce nuclear fuels indigeniously we will have to put into place a system for mining and processing of uranium ores and also for its conversion and enrichment.

Yazd Saghand project is designed to recover uranium from natural deposits. In this facility, uranium is extracted from a depth of 350 meters and transported to the Ardakan facility to go through various physical and chemical processes to produce yellow cake. The Isfahan facility known as UCF project converts yellow cake to uranium hexa flouride, metallic uranium and uranium dioxide; the last two items are the main components of nuclear fuel.

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UF6 is the main feedstock for the Natanz enrichment facility. Therefore, our activities in the Natanz facility are designed to complete the uranium enrichment unit for production of nuclear fuels for power plants using low enriched uranium of around 3% to 5% U-235. All the aforementioned projects are being carried out with the full knowledge and also under the inspection of IAEA safeguards.

A Zirconium Production Plant (ZPP) is now under construction in Isfahan for production of fuel cladding. Moreover we are in the process of constructing a facility in Arak to produce heavy water which is an essential constituent of HWR reactors.

In the month of June 2002 our Permanent Resident Representative to IAEA had notified the Secretariat about my country's involvement in the various fields of fuel cycle. Later in the month of September 2002, they were officially informed about the construction of the Natanz enrichment facility which along with the UCF project were recently visited by Director General and his colleagues.

Nuclear experts are aware that the volume of nuclear fuels needed for power plants with a capacity of 7000 megawatt is very high and that we are bound to work out a long-term plan for the provision of the needed fuel from our local resources by 2020.

Some political and media circles brand Iran's nuclear program as ambitious and economically unjustifiable. These critics should exactly clarify what is ambitious. How could a country's program to produce 7000 megawatt nuclear electricity and its required fuel under the surviellance of IAEA be called ambitious. If that is the case, then, there are tens of countries which fall into the same category. As to the allegation that this activity is economically unjustifiable one must say that countries such as the United states, the Russian Federation, France, UK, Germany, China, Japan, India, Canada, Pakistan and Argentina which possess the technology of nuclear fuel-cycle on either industrial or semi industrial scales are engaged in an economically unjustifiable activity.

Also, in response to the allegation that Iran's uranium enrichment facility is designed to develop nuclear weapons, I should say that at present over 12 countries are engaged in uranium enrichment activity on either industrial or semi-industrial scales, can one then claim that all these countries are working to develop nuclear weapons? Can advances in chemistry, or microbiology and genetics be construed as a tendency to develop chemical or microbiological weapons?

There are also assertions that while the Russian Federation is committed to meet Iran's need for nuclear fuel, then, why Iran is investing millions of dollars on developing its own nuclear fuel cycle. In response to such assertions, I should say that, first, the Russian Federation is committed to provide nuclear fuel only for the Bushehr power plant and has no commitment to meet our needs for the nuclear fuel in other nuclear power plants that we have decided to build. Second, even with respect to the Bushehr power plant, the Russian Federation has committed itself only to provide nuclear fuel for a limited period of time and after the termination of our contract with Russia, we have to provide the nuclear fuel needed for this plant from other sources.

The speculations raised over the secrecy of Natanaz and Arak facilities are quite unfounded and irrational for the following reasons: First, the Arak facility is designed to produce heavy water which does not fall under the IAEA safeguards. Therefore, we are not legally bound to declare it. Second, given the huge installations and distillation towers erected on the ground in Arak as well as sophisticated satellites and coverage of the international mass media, speaking of the secrecy of the activities of such facility looks irrational and unreasonable. Third, under the provisions of NPT and our safegaurds agreement wirth IAEA, we were obliged to inform IAEA 180 days before the date of transporting UF6 into the Natanz site. So, we had no legal obligation to declare it before the date. <u>However, we decided to</u> formaly inform IAEA of the existence of this facility in September 2002 before the hue and cry that was raised by the Western media and their propaganda machine.

Although we were under no legal obligation to do so we, as a sign of goodwill, invited the IAEA Director General and his coleagues to visit the Natanz facility. Therefore, there has not been and will not be any attempted secrecy in this regard as we are committed not to keep any issue relevant to the provisions of NPT secret from the international sight.

Here, I deem it necessary to refer, albeit, briefly to the cooperation between the Islamic Republic of Iran and IAEA as well as the policy of my country towards nuclear treaties and safeguards.

The raison'detre, objectives and responsibilities of IAEA regarding the development of peaceful uses of atomic energy in the world and prevention of its non-peaceful applications were accepted by the Islamic Republic of Iran since its inception and my country was among the first countries to become a member of IAEA by ratifying its statute in 1958. Ever since, there has been good cooperation between this Agency and my country, and it is our sincere wish to further expand our collaboration with the Agency.

My country's policy from the very beginning has been based on support for all treaties and conventions designed to prevent proliferation of nuclear weapons. It was in line with the same policy that Iran signed the statute of IAEA in 1958 and explicitly obliged itself under its provisions to peaceful use of nuclear energy and non-proliferation of nuclear weapons. Likewise, Iran acceded to different nuclear treaties such as Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space And Under Water, in 1963, NPT in 1970 and Treaty on prohibition of

Emplacement of Nuclear Weapons And Other Weapons of Mass Destruction on the Sea Bed, the Ocean Floor And in the Subsoil Thereof. Besides these instruments, Iran also signed CTBT.

As to the safeguard's regime, I should say Iran was among the first countries to accept the relevant international commitments. Iran signed a Comprehensive Safegaurds Agreement with IAEA in 1973 based on Article 3 of NPT under which it undertook to place its nuclear activities and facilities under the surveillance and inspection of the Agency.

Iran also signed in 1974 the subsidiary Arrangement to facilitate the inspection of Iran's nuclear activities by IAEA Safeguards. These measures demonstrate the transparency of nuclear activities in my country.

Though Iran has signed and ratified all binding international instruments on non-proliferation of nuclear weapons and disarmament, unfortunately, it is still being, either partially or fully, denied its legitimate right under Article 4 of NPT to make peaceful use of nuclear energy.

It is sometimes alleged that Iran's peaceful nuclear activities are not sufficiently transparent.

In response to such allegation, I should say that nuclear transparency has its own criteria and standards set forth in the relevant international treaties and the decisions of IAEA. Under these treaties and decisions, any country which has fulfilled its international commitments on nuclear activities, has observed the criteria and standards of nuclear transparency. But based on the same standards, any infromation related to eachnuclear facility should be transmitted in due course through certain sateges and procedurs. Here your kind attention is drawn to the very important Report drafted by the Agency after the visit to I.R. of Iran by a top-ranking delegation from IAEA headed by Mr. Jon Jennekens, Deputy Director General and Head of Safeguards Department at my country's invitation on February 1992 ;

" The conclusion of the Team is that all of the facilities visited at the six sites included in the tour were presently used to conduct activities which are consistent with the peaceful application of nuclear energy and ionizing radiation....Iranian authorities consistently stated their willingness to extend the duration of the visit for as long as the Team considerd it necessary and similarly to arrange for the Team to visit any sites in Iran which might be of interest to the Agency in the peaceful nature of Iran's nuclear research and development and proposed nuclear power program. "

Iran's policy towards the Additional Protocol is both clear and rational.

Under its provisions, the protocol will become effective only after its ratification by the competent authorities (parliaments) of the respective countries. My country has no difficulty accepting this protocol and, as a mater of fact, it is approaching it positively. At the same time, it doesn't intend to ratify and enforce the provisions of this protocol without any conditions. The International Law of Treaties, too, does not oblige any country to accede to any international treaty or instrument. Our people and authorities always ask why Iran which has acceded to different nuclear treaties and safeguards agreements and has rendered all sorts of cooperation as demanded by IAEA and while its nuclear activities, as attested by the official reports of IAEA inspection teams are peaceful, still remains subject to various international pressures and refuse to accede to treaties such NPT are left on their own without being asked to be accountable for their nuclear conduct.

In conclusion, I wish to make the following few points:

As I stated in the 46th session of IAEA in September 2002, Iran has envisaged the production of 7000 megawatt nuclear electricity within the next two decades in its long-term planning. To achieve this grand objective, we need to formulate and enforce plans in various advanced fields of nuclear technology such as nuclear fuel cycle, nuclear safety and nuclear wastes. In pursuit of this objective, we first sought assistance from Western countries and called for joint cooperation in the above-mentioned areas. We opened the way for dialogue and elaborately explained why we need nuclear energy. But, unfortunately, our offer met with a cool reception. It m ay be of interest, here, to note that my country under the current undue restrictions has not yet been able to recover its approximately 100 tones enriched uranium and 390 tones tails uranium currently stored in Lingen, Germany. They did not even allow us the transfer of the said material to a country -specifically Russia- outside the

Euroatom area. Having been despaired of the Western cooperation in this field, we turned to the policy of self-sufficiency. In this connection, we realized that we need to carry on our activities concurrently in various fields. Hence, we concurrently focused on the production of heavy water for HWR reactors and uranium enrichment for production of nuclear fuel for LWR reactors while we were not certain as to which of these two endeavors shall embrace success.

Thanks God that a breakthrough was achieved in both areas and we have now made the decision to build both HWR and LWR reactors.

2. Opposition of certain powers to Iran's peaceful nuclear development plan in the post_revolution_era_under_false_excuses_is_a_matter_open_to_question. These countries not only had remained silent to the rapid and even unrestrained nuclear development of Iran before the revolution, but they had also played a major part in its development process.

Based on these recommendations and western interestes, my country was allured into investing billions of dollars in the construction of nuclear facilities such as the Isfahan nuclear technological center for nuclear fuel manufacturing -undertaken by both the French and the British- and Bushehr nuclear power plants, etc. Can we now ignore all those investments and just dispense with them.

The recommendations made by Stanford Research Institute for the production of 20,000 megawatt nuclear electricity within a period of 20 years and the monopoly of western countries over Iran's nuclear contracts for the construction of nuclear power plants and production of nuclear fuel point to the influence exercised by the West over Iran's nuclear activities in the pre-revolution era.

I am basically wondering as to which of these offers and policies of the West should we adhere to. The offer of the US researchers for the production of over 20000 megawatt nuclear electricity and their plan for its materialization or the politically charged, interventionist suggestions made by certain politicians saying that oil and gas rich Iran does not need to build nuclear power plants? I would like to ask wehther the same suggestion has ever been forwarded to other fossil fuel rich countries such as the United States, the Russian Federation,UK, Canada, Mexico and others. 3. Iran is a party to NPT and some other major international instruments such as CTBT, BWC, CWC etc. It has always remained loyal and committed to these instruments and has been insistent on the fulfillment of its commitments. Furthermore, it has sincerely cooperated with the relevant international organizations like IAEA on a voluntary basis.

Unlike some countries which exclude themselves form others through domineering gestures, my country as a member of many of international protocols and treaties has never created any obstacles to such treaties. It was not Iran which bombed Hiroshima and Nagasaki or used depleted uranium in the wars in the Balkans and the Persian Gulf and even in the recent war, nor was it my country which provided chemical weapons to Iraq to use them against its own people in Halabja under the cover of a news blackout provided by certain Western circles despite their deceptive slogans.

4. It is asserted that Iran being surrounded by some nuclear neighbours has no option but to equip itself with nuclear weapons for its own protection. In response to such assertion one may ask if nuclear weapons of the Soviet Union helped prevent its collapse, or if Iraq was able to ensure its protection by means of chemical and biological weapons. It may further be asked if the tragic events of September 11th were the result of a nuclear attack and if the U.S government was able to prevent these events through its nuclear weapons.

My country's policy in this regard is based on the clear stance of President Khatami who stated: "our might and strength lie in our faith, our logic and the competence of our people. Having been blessed with this might one does not need to develop destructive weapons."

5. As it was stated before, the motto of "peacefulness, transparency and independence" constitutes the main pillar of our nuclear policy and, hence, the development of an independent course for acquisition of nuclear knowledge is one of the main components of this policy. Our nation has decided to equip itself with the nuclear knowledge and technology for peaceful uses and has accepted the surveillance of IAEA safeguards over those activities which fall under the provisions of NPT. It has been for many years that our nation has defied the shoulds and should

nots prescribed at the whims of certain colonial powers outside the framework of internationally recognized norms.

The rules and principles of international law do not allow any country to impose its own wishes and demands on independent states through use of force, coercion or any other violent means.

No single country can claim to be the sole guardian of the global peace, rather all countries of the world should join hands to advocate the cause of peace and remain committed to it protection.

6- Without any doubt, one of the main duties and objectives of IAEA is to prevent non-peaceful use of nuclear technology and, at the same time, ensure the peaceful development and transfer of this technology to developing countries. Hence, the Islamic Republic of Iran has always been insistent on the full application of the provisions of NPT to all IAEA member states and has remained critical of those member states which have failed to accede to this important treaty.

The practice of double-standards and discriminations followed by certain countries has practically challenged and undermined the effectiveness of NPT and CTBT. There is no doubt that treaties such as NPT are an effective step towards the control of proliferation of nuclear weapons but the practice of discrimination and double standards have obscured the prospects of total nuclear disarmament.

In closing, I avail myself of this opportunity to, once again, call on those countries which are able to assist us in the development of our nuclear power plant, nuclear fuel and its peripheral equipment to cooperate with us. My country is independent and has now become the champion of dialogue among civilizations and a promoter of the cause of the global peace.

We wish to rely on our own capabilities with respect to nuclear knowledge and technology. At the same time, we try not to ignore technological advances made by other countries in the nuclear field. We welcome any cooperation in the field of nuclear science and technology especially in the development of nuclear power plants and nuclear fuel.

Thank you