Secretary Ernest Moniz 2015 IAEA General Conference September 14, 2015 Written Remarks for the Record

Thank you, Ambassador Formica. Congratulations on your election as President of this Conference. I also want to thank Director General Amano for his outstanding leadership.

I am honored to lead the U.S. delegation to this year's General Conference, and I want to first share this message from President Obama:

FINAL POTUS STATEMENT:

I send greetings as you gather in Vienna for the 59th International Atomic Energy Agency (IAEA) General Conference. This conference demonstrates the international community's support for the invaluable role of the IAEA, and I thank you for your efforts.

The United States remains committed to pursuing a world without nuclear weapons. That is why we have worked with our international partners for decades to establish and strengthen the nuclear nonproliferation regime—encouraging peaceful uses of nuclear

technology, while preventing the spread of nuclear weapons. The IAEA has been at the heart of these efforts, constantly adapting to new challenges, developing and promoting international standards for nuclear safety and security, and crafting state-of-the-art approaches to nuclear safeguards. The Agency's integrity and capacity to undertake its technical responsibilities deserve our constant support and protection so that the IAEA can continue to contribute to global security.

This year, with the conclusion of negotiations on the Joint Comprehensive Plan of Action (JCPOA) with our P5+1 partners, the European Union, and Iran, we demonstrated once again that it is possible to settle difficult nonproliferation issues diplomatically. Under the interim deal that allowed comprehensive negotiations to take place over the past 2 years, the IAEA played a key part in building the necessary confidence to complete the long-term deal by verifying Iran's implementation of its nuclear commitments. The IAEA's role is central to the verification regime established in the JCPOA.

Next year, I look forward to hosting the fourth Nuclear Security Summit in Washington, where one of our primary objectives will be the strengthening of the global nuclear security architecture. The IAEA, which already contributes extensively to global nuclear security efforts, will play an even more prominent role after the summit as we further

coordinate nuclear security activities among nations, institutions, and initiatives.

As you join together in Vienna and work to shape a better future across the globe, I call upon all Member States to strengthen the Agency's ability to ensure nuclear programs are peaceful and secure. I wish you all the best for a productive General Conference.

End of quote.

NONPROLIFERATION AND THE IRAN DEAL

President Formica, we are gathered in Vienna at an hour when the world's attention is focused on the International Atomic Energy Agency. After two demanding years of tireless negotiations, the United States, Germany, France, Russia, China, the United Kingdom, the European Union, and Iran reached agreement on the Joint Comprehensive Plan of Action (JPOA) to ensure the exclusively peaceful nature of Iran's nuclear program. Shortly after the negotiations concluded in Vienna two months ago today, the United Nations Security Council adopted Resolution 2231 endorsing the JCPOA. This international endorsement

represents our shared commitment to upholding global nonproliferation norms – and our collective determination to enforce them.

The JCPOA is unique in my experience, in both its structure and the tasks it commits to undertake. It assumes long-term engagement built around a step-by-step approach with reciprocal commitments among the parties. Most important, it memorializes in the Preamble the affirmation that "under no circumstances will Iran ever seek, develop or acquire nuclear weapons."

In a letter to President Obama, twenty nine scientific leaders deeply familiar with nuclear issues wrote, "This is an innovative agreement, with much more stringent constraints than any previously negotiated nonproliferation framework"

These innovative and unique aspects of the deal include a fixed time frame for providing access to undeclared sites and full uranium supply chain surveillance. In addition, Iran has reinforced its pledge to never seek, develop or acquire nuclear weapons by agreeing to not engage in the development of key nuclear weaponization-related capabilities.

Another bold and creative solution is the resolution of concerns over plutonium production from the Arak heavy water reactor. The P5+1 and

Iran have committed to supporting a modernization project at Arak that will redesign the reactor as a multi-purpose research reactor fueled with low enriched uranium and plutonium production minimization. This will provide Iran with a modern research tool for peaceful purposes and simultaneously address international concerns about the potential accumulation of plutonium. This concern is further addressed by Iran's commitment to ship all spent fuel out of Iran for the reactor's life.

The IAEA is already playing a critical role in implementing the nuclear deal negotiated between the P5+1 and Iran. The JCPOA requires that Iran cooperate with the IAEA by October 15 on the Agency's investigation into Possible Military Dimensions of Iran's previous program. The IAEA will submit its report to the Board of Governors in December.

Although it was not the goal of the negotiations, the JCPOA provides an opportunity to discuss the broader safeguards regime in the future.

The United States commends the IAEA's ongoing efforts to address all present and past concerns regarding Iran's nuclear program. We also welcome the IAEA's essential and expansive role in verifying Iran's nuclear-related commitments under the JCPOA in the future. Success will draw upon the support of all Member States.

We know that the IAEA's ability to successfully implement this deal hinges on the agency receiving sufficient funding to take on this complex task. We call on the international community to contribute to this request to ensure that the IAEA has the resources it needs to monitor this crucial agreement.

In addition to regular and extra-budgetary contributions that the United States provides to the IAEA annually, we are proud to partner with the IAEA on a range of additional technical support for its nonproliferation activities. The IAEA uses advanced monitoring technologies in their inspections work, many developed at the U.S Department of Energy's national labs.

SECURITY

Of course, nonproliferation is not the only issue that we must address. Mr. President, the threat of nuclear terrorism remains one of the great dangers of our time. To combat this threat, we call on all Member States to support a strengthened global nuclear security architecture built on legally binding instruments, multilateral institutions, voluntary collectives, and national actions.

To build further momentum in strengthening the global nuclear architecture, the United States will host the fourth Nuclear Security Summit in Washington, DC next spring. The previous Summits reaffirmed the central role of the IAEA in global nuclear security, and U.S. commitment to support and bolster the IAEA's nuclear security capabilities.

I also am pleased to note that the United States submitted its instrument of ratification for the Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) to Director General Amano on July 31, 2015. In addition, we plan to deposit our instrument of ratification for the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT) with the U.N. very soon. The United States strongly urges all countries that have not yet done so to join and fully implement these agreements.

SAFETY AND EMERGENCY RESPONSE

Mr. President, with more reactors coming online, it is increasingly important for regulators and operators to discuss and cooperate on issues related to nuclear safety. There has been a notable decline in participation in the Convention on Nuclear Safety's peer review process. We encourage current Contracting Parties to join the Convention and

fully participate in the peer review process. We also appreciate the Director General's report on the Fukushima Daiichi accident.

It is also important to handle liability issues through mechanisms based on treaty relations. This year we reached a significant milestone with the entry into force of the Convention on Supplementary Compensation for Nuclear Damage, or CSC.

The United States is committed to support the IAEA International Conference on Global Emergency Preparedness and Response that will take place next month here in Vienna and encourage other Member states to attend.

ENERGY

As we approach the upcoming Paris climate negotiations, countries must put forward ambitious climate commitments. The threat of climate change calls for global responses, including expanded use of nuclear power to produce the electricity needed to sustain rising standards of living of the world's growing population.

President Obama has made clear that nuclear energy is an important part of our "all-of-the-above" energy strategy. In partnership with our

nuclear industry, the U.S. Government is supporting the deployment of reactors with passive safety features both in the United States and around the world.

The U.S. Government has partnered with U.S. industry to support the licensing and technical support process of SMRs – and we expect the first SMR to be deployed within the next decade.

The U.S. Department of Energy also has issued \$8.3 billion in loan guarantees to support the construction of two passively safe reactors at the Plant Vogtle near Augusta, Georgia.

By incorporating passive safety systems into SMRs and the large Generation III designs, we aim to provide a broader set of options for safe, reliable nuclear energy. At the same time, we also are studying security and safeguards aspects of new designs.

With nearly 440 operating nuclear reactors generating electricity worldwide, and approximately 70 reactors under construction, and many more planned, it is clear that there continues to be strong global interest in peaceful nuclear energy.

This means that countries with little or no experience will face complex tasks of managing nuclear facilities, as well as protecting and safeguarding nuclear material, and safely managing spent fuel.

That is why we support the important work of the IAEA to help its

Member States build the necessary infrastructure, as well as the efforts
of the Nuclear Energy Agency, the International Framework for Nuclear
Energy Cooperation, and the Generation IV International Forum, to
ensure the continued safe, secure and sustainable use of nuclear energy.

PEACEFUL USES

Finally, Mr. President, we strongly support the Agency's efforts to help interested Member States to use the diverse applications of nuclear science and technology to meet their national development needs. IAEA programs have contributed directly to the addressing the Millennium Development Goals, and will be equally relevant to the 2030 Agenda for Sustainable Development.

The IAEA's Technical Cooperation Program remains the core of this effort, and deserves our full support. In addition, the IAEA's Peaceful Uses Initiative, or PUI, is an essential source of voluntary funding. The United States is pleased to be one of 19 IAEA Member States that, along

with the European Union, have collectively contributed over \$77 million in monetary or in-kind contributions to the PUI since its inception in 2010.

During the 2015 NPT Review Conference, the United States announced an additional \$50 million contribution to support the PUI over the next five years. The United States urges all countries, groups of countries, and organizations in a position to do so to contribute to the PUI.

I am also pleased to announce that the United States has donated another \$3 million to the IAEA's Renovation of the Nuclear Applications
Laboratories at Seibersdorf (ReNuAL) project. This fulfills our pledge made at the NPT Review Conference for \$2 million. Altogether, the United States has now contributed approximately \$5.5 million to
ReNuAL, and we hope that this will serve as a catalyst to encourage further donations from other IAEA Member States so that construction can proceed quickly and efficiently.

Mr. President, the United States commends the IAEA and Kazakhstan on signing the Host State Agreement for the IAEA LEU Bank, which is an important element of our collective peaceful uses and nonproliferation efforts.

CONCLUSION

Mr. President, as we look ahead, our great challenge is to support global development while adapting to become more responsible stewards of our future. Safe, secure, and peaceful nuclear technology will be an important part of addressing this challenge.

We will continue to look to the IAEA to provide the necessary technical expertise to meet our shared goals, and the Agency's financial resources, political support, and legal authorities must be commensurate with the task at hand. We urge all Member States to contribute toward that end.

Thank you.

Statement on behalf of the Euratom Community Mr Gerassimos Thomas, Deputy Director-General, Directorate-General for Energy, European Commission 59th General Conference of the IAEA Vienna, 14-18 September 2015

Mr President, Mr Director General, Ladies and Gentlemen,

On behalf of the European Commission speaking for the Euratom Community, I welcome the comprehensive role that the International Atomic Energy Agency plays in promoting the peaceful use of nuclear energy, its efforts to advance global nuclear safety and global nuclear security.

First of all, let me congratulate you, Mr. President, on your election as President of this General Conference. The European Commission would also like to express its appreciation to the IAEA Director-General and the Secretariat for their professional and impartial work, and to assure them of our unwavering support. We also welcome the applications for membership by Antigua and Barbuda, Barbados and Turkmenistan.

The cooperation between the IAEA and the Euratom Community is long and well-established, particularly in the area of nuclear safeguards. Over the years, the cooperation has been extended to cover nuclear safety, radiation protection, and waste management as well as emergency preparedness and response.

European Energy Union

Ladies and Gentlemen,

The European Union and its Member States are facing energy challenges that are increasingly complex and could have serious and unexpected consequences on the security of energy supply. They can be impacted by crises such as the one between Russia and Ukraine or by climate change implications. With a common approach, the EU can significantly contribute to coping more efficiently with energy challenges on the continent and globally.

The Commission's Strategy for a European Energy Union, which was adopted in February 2015 builds on five mutually reinforcing dimensions:

- energy security, solidarity and trust;
- the internal energy market;
- energy efficiency as a contribution to the moderation of energy demand;
- decarbonisation of the economy and
- research, innovation and competitiveness.

The focus of the nuclear industry in the EU is changing. We are moving from a phase of mainly operation of existing power plants built 30 to 40 years ago, to a phase of replacing or prolonging aging capacity. Such changes bring forward a number of challenges:

Firstly, the market in which nuclear power plants operate has changed significantly. Since the opening of the electricity markets in the late 90's, the increased use of spot markets has led to increasingly volatile wholesale prices for electricity. The influx of wind and solar power with low marginal costs has further led to lower and more volatile electricity spot prices in some EU wholesale markets.

Secondly, the accident in Fukushima has changed public perception and the nuclear energy policy in some countries.

Thirdly, efficiency in the building of new generation reactors has to be improved as experience with new designs is accumulated and competition increases.

Last but not least, the geopolitical framework has changed. We have a European Energy Security Strategy and we want to build an Energy Union. Investors in energy, including in nuclear energy, will have to show how their projects contribute to increased security of energy supply for the EU.

As part of the Energy Union strategy, the Commission presented in August proposals to deliver a new deal for energy consumers, to launch a redesign of the European electricity market, to update energy efficiency labelling and to revise the EU Emissions Trading System.

Financing of nuclear generation capacities

European Union countries will be faced with important investment decisions regarding their national energy mix. Nuclear is part of the equation in the transition to a low carbon economy together with renewable energy sources and improvements in energy efficiency.

For the nuclear sector this will translate into long-term capital intensive investments into nuclear new builds and the continued operation of existing plants.

In the coming months, the Commission intends to publish a Nuclear Illustrative Programme, the so-called PINC, which will outline the needs for investment across the fuel cycle in Europe. It aims to contribute to a discussion on longer term investment planning for new nuclear power generation capacity, the necessary investments for the long term operation of existing nuclear plants and the necessary investments in the back-end of the fuel cycle.

Nuclear safety - EU/Euratom legislative framework

The European Union has a coherent and comprehensive legal framework for a safe, secure and sustainable use of civil nuclear power by all the countries that choose this source of energy and also in those fields that are not related to electricity generation.

After the Fukushima accident, the European Union updated and strengthened its nuclear safety legal framework. A revised Nuclear Safety Directive was adopted in July 2014. By summer 2017, EU Member States will have to implement the provisions of this directive in their national laws.

The reassessment of the safety of nuclear power plants in the EU - the stress tests - that the Commission carried out together with the Member States following the Fukushima accident, has reached the stage where required safety improvements are being implemented by nuclear operators. The Commission assessed the progress in collaboration with the national nuclear safety regulators in April 2015

and will continue to follow the implementation of the measures in EU Member States.

Spent fuel and radioactive waste management

After the adoption of the radioactive waste management Directive on the responsible and safe management of spent fuel and radioactive waste in 2011, national programmes and reports had to be submitted this August . The Commission is analysing them and plans to report to the Council and the European Parliament on the implementation of the Directive in 2016.

The Commission is also collaborating with the IAEA on the implementation of the peer reviews required by the Directive and signed a contract with the IAEA to support the development of guidelines of the ARTEMIS peer review service.

The Commission represented Euratom at the 5th Joint Convention meeting in May 2015 and also participated in the General Committee and Chaired Country Group 2 of this meeting. It is monitoring the funding regimes in the Member States in view of properly applying the "polluter pays" principle and has prepared the Third report to the European Parliament and the Council on funding of decommissioning and waste management. It is also finalising the 8th Situation Report on Radioactive Waste and Spent Fuel Management in the EU, foreseen to be published at the beginning of 2016.

Basic safety standards

Since December 2013, the European Union has a revised Basic Safety Standards Directive. The revised Directive modernises and consolidates the European radiation protection legislation and takes into account recent international recommendations and standards.

On this occasion, I would like to acknowledge the valuable contribution made by IAEA to the work of the Commission to support a coherent implementation of both the Euratom BSS and the International BSS.

During this General Conference, the IAEA and the European Commission have organised a side event dedicated to the implementation of both Euratom and International basic safety standards. It was focused on medical applications of ionising radiation.

Nuclear safety cooperation with the IAEA

Ladies and Gentlemen,

The cooperation between the International Atomic Energy Agency and the European Commission has a long history, but has been recently enhanced.

Since two years, annual meetings at the level of senior officials are organised. These meetings bring together officials from the Commission and European External Action Service with officials from the Agency to coordinate cooperation to achieve common goals in the areas of Nuclear Safety, Nuclear Security, Nuclear Safeguards, Nuclear Applications, Security of Supply, and Nuclear Research and Innovation.

Euratom also supported the IAEA in drawing up its report on the Fukushima-Daiichi accident. We demonstrated our commitment by providing technical experts from the JRC to analyse accident findings, review data and provide text as well as review early drafts of the report.

It is essential that Euratom and IAEA ensure that the momentum to improve global nuclear safety is maintained and further increased where necessary building on the Fukushima report and the lessons learnt from the on-going investigations on the effect of the meltdowns and radioactive releases from the accident.

Another example of closer cooperation are the synergies in areas of competence building and emergency preparedness and response. This work is taking place under the auspices of the Senior Officials Liaison Committee established by the Memorandum of Understanding for a partnership that was signed in 2013 between the Commission and the Agency.

The Commission, by its actions in the EU and outside, fully supports the IAEA Action Plan on Safety and contributes to the efforts of the Agency to strengthen its nuclear safety standards. These efforts need to be pursued in the future, with the involvement of the Member States.

The Commission cooperates closely with the IAEA on the implementation of nuclear safety projects in third countries and provides considerable support to the Technical Cooperation programmes and to the implementation of the Agency's Action Plan. In this framework, we have also developed joint projects with the Agency.

The Commission welcomes the work performed by the IAEA in organising "Integrated Regulator Review Service" or, shortly, IRRS missions to EU Member States as foreseen by the Directive on Nuclear Safety. Comparable peer-review missions in the area of waste safety are being developed together.

Nuclear Safety Convention

At the Diplomatic Conference held last February, all the attending Contracting Parties, including the 28 EU Member States and the Euratom Community, agreed upon a text for a Declaration containing a set of principles and implementation mechanisms to improve and enhance the safety of nuclear power plants.

The Commission, on behalf of the Euratom Community, calls for significant efforts among all Contracting Parties, in implementing the Declaration with a view to prevent nuclear accidents and, should an accident occur, mitigate their consequences on the population and long-term off-site contamination.

Contracting Parties National Reports to be submitted in the framework of the next CNS Review Meeting in 2017 will be the basis for ensuring the proper conduct of their peer reviews to which all the Contracting Parties should actively commit themselves.

Emergency preparedness and response

The Euratom Community has been operating since years a European system for quick and automatic exchange of environmental radiation data. Today this exchange system includes not only radiation dose rate data, but also a wide range of nuclide specific environmental radiological data presented through a sophisticated web-based user interface.

The Commission will be happy to continue collaborating in this area in order to improve the transfer of information among the IAEA Member States and to seek further areas of cooperation to strengthen emergency preparedness and response measures.

Emergency Preparedness and response is a priority for the Commission and the EU Luxembourg Presidency of the Council of Ministers. EU cross border cooperation in the case of EP&R will be strengthened. Within the framework of preparation for the implementation of the BSS Directive the Commission is organising workshops and will intensify the dialogue with the civil society.

Cooperation in Nuclear Safeguards and implementation of the Joint Comprehensive Plan of Action (JCPOA) as an instrument to address a non-proliferation crisis and to develop regional co-operation

The European Commission welcomes the Iran nuclear agreement, which marks a turning point in relations between Iran and the rest of the world. The European Union, as the co-ordinator of the E3+3 countries, has played a leading role in facilitating this agreement. We remain fully committed to contribute to the implementation of the agreement.

The Joint Comprehensive Plan of Action (JCPOA) encompasses agreed limitations on Iran's nuclear programme, with the objective that in the end this will give the assurances that Iran's nuclear program is exclusively peaceful; it also foresees the progressive and reversible lifting of all international and national sanctions related to Iran's nuclear programme, and steps on access in areas of trade, technology, finance and energy.

The Euratom Community will work, including in close co-operation with the IAEA, in order to ensure the effective implementation of the agreement.

Support in a variety of nuclear areas of interest to Iran can be envisaged, covering a broad spectrum of activities, from nuclear

safety assistance to safeguards support to the IAEA in the medium to longer term.

All 26 Non-Nuclear Weapon States in the European Union have Comprehensive Safeguards Agreements in place together with the Additional Protocols. Integrated Safeguards are fully implemented in the EU since January 2010. The newest EU Member State, Croatia, is expected to accede to the Euratom Community's Safeguards Agreement in the very near future.

The Euratom Community continues to provide important technical support to the IAEA through the European Commission Cooperative Support Programme in the field of Safeguards, which is one of the biggest support programmes in this field. In 2014, the European Commission actively supported the IAEA in the preparation of the Safeguards Symposium.

Euratom also recognized the need to strengthen the Agency's capability to provide credible and timely analysis of safeguards samples. Since 2010, the Community has committed more than €10 million from the Instrument for Stability to the international ECAS project enhancing the IAEA's Safeguards Analytical Services in Seibersdorf and the Trans-Uranium Institute in Karlsruhe supports the IAEA with analytical services.

Cooperation in Nuclear Security

Euratom has continued its support and collaboration with the IAEA in nuclear security. The Practical Arrangement signed in 2013 is under implementation, closely followed by both parts. The EU CBRN Centres of Excellence, funded by the Instrument Contributing for Stability and Peace, have taken a stronger role in the regions. The synergies between these and the IAEA Network of Nuclear Security and Support Centres are being explored by bringing together the national contact points of both initiatives to ensure the maximum benefit for the Partner Country with the most efficient use of the resources invested. The two parts establish continuous dialogue through information exchange meetings and international working groups, vital to achieve harmonisation of, for example, best practices and training in border monitoring for RN material.

The EU has also made a contribution of €25 million to the IAEA lowenriched uranium (LEU) Fuel Bank. We are pleased that the IAEA-Kazakhstan Agreement on the establishment of the bank was signed on 27 August and that its legal framework is now established.

Safeguards, security and safety are still seen as separate areas in nuclear governance. While this is justified for well-established technical and legal reasons, given today's overarching challenges, further effort should be put in identifying synergies and proposing implementation measures.

Regional nuclear safety cooperation

Ladies and Gentlemen,

Regional co-operation to promote nuclear safety is a priority for the Euratom Community as it is for the IAEA. We strongly believe in the importance of promoting nuclear safety not only in the EU, but also beyond our borders. The Commission associated to its stress tests all neighbouring countries which operate or own nuclear installations or which have plans for the development of nuclear power.

In the EU Multiannual Financial Framework for 2014-2020 and its External Financing Instruments, €225 million are earmarked for the Instrument for Nuclear Safety Cooperation. This enables the EU to continue to support nuclear safety and safeguards in non-EU countries worldwide.

The new INSC programme will continue past activities and put emphasis on the EU neighbouring countries, Ukraine in particular (where the completion of the Chernobyl projects will require a significant additional effort). It will expand in new areas like regulatory support to mining activities in Africa, regional emergency preparedness and response and environmental remediation of the uranium mining legacy in Central Asia for which the IAEA has a key coordinating role through the Coordination Group for Uranium Legacy Sites (CGULS).

Particular emphasis is being given by the Euratom Community to supporting the Regulatory authorities in third countries. The joint effort being carried out with the IAEA through the Regulatory Cooperation Forum is worth noting.

The EU projects aim to assist the beneficiary country in the most efficient way and will complement national and other international projects and initiatives, such as the IAEA Technical Cooperation Programme. The Research and Training Programme of Euratom for the period 2014-2018 ("Euratom Programme"), which complements the Horizon 2020 Framework Programme for Research and Innovation, is open to non-EU countries, with Switzerland being associated country to that Euratom Programme. Also in the Seventh Euratom Framework Programme more than fifty entities from fourteen non-EU countries participated in 37% of the fission research projects and beneficial cooperation was accounted in fusion R&D as well, especially with the ITER partners. That international research cooperation policy is indeed underpinned also by the bilateral Cooperation Agreements, respectively on nuclear research and on fusion R&D, between Euratom and several non-EU countries.

Fusion

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I would also like to mention the leading role that Europe plays in the ITER project, one of the world's biggest scientific collaborations on the route to fusion as a sustainable energy source. .. Europe has demonstrated consistent leadership in fusion research over the years through JET. France is now hosting the ITER site where the first Tokamak reactor of such a size will be build.

The ITER international organisation involves seven countries representing over half the world's population and is bringing the international community together behind the important and ambitious mission to bring clean and limitless energy into everyday use.

Supply of medical radioisotopes

The fragility of the supply of medical radioisotopes was well demonstrated in the serious shortages in 2009 and 2010. The EU Observatory on the Security of Supply of Medical Radioisotopes and its four working groups, in partnership with the industry, have

strived to mitigate the risk of such events. One major achievement is the successful coordination of planned reactor outages.

The Observatory created the Joint Communication Team (ESA, OECD/NEA and AIPES), which is activated at the potential onset of a shortage and works providing prompt communication to governments in case of supply interruptions, and has been instrumental in recovering the confidence of the medical and patient community in the security of supply. The Observatory is also monitoring and supporting the conversion of HEU to LEU-based medical radioisotope production in Europe.

The mitigation of the risks surrounding the supply of isotopes is also tackled through research on the successful conversion to low enriched fuel for high-performance research reactors. This is pursued, in particular, as part of the HERACLES-CP project launched in 2015 amongst the first Horizon 2020-Euratom grants: "Towards the Conversion of High Performance Research Reactors in Europe".

Research and training

The emphasis of the Euratom Research and Training Programme for 2014-2018 is on continuous improvement of nuclear safety (including waste management and emergency preparedness), security (including safeguards) and radiation protection. The relevant Euratom budget consists of €315 million for indirect actions for nuclear fission, safety and radiation protection, and €559 million for direct actions.

Furthermore, nuclear safety and security have been given increased emphasis in the Euratom research programs. Moreover research and innovation Agendas have been established by the SNE-TP ("Sustainable Nuclear Energy – Technology Platform") and the IGD-TP ("Implementing Geological Disposal of Radioactive Waste") - Technological Platform) via a large consultation using IAEA expertise and been implemented through significant number of scientific projects and involvement of Euratom experts. The current launch from SNE-TP of the Euratom supported NUGENIA Association to promote Nuclear Safety research, offers an even

greater opportunity for technical cooperation in this area. EC RTD and IAEA services are active in determining concrete terms for this cooperation.

Education and training as well as knowledge management in nuclear fission and radiation protection are crucial issues of common interest for both Euratom and the IAEA. European projects, whether for academic education or for vocational training, are defined in synergy with the stakeholders in terms of learning outcomes referring not only to knowledge but also to skills and competences (or attitudes) that are requested for job qualification. This is aligned with the IAEA approach in this domain. New "Euratom Fission Training Schemes" have been launched in collaboration with IAEA, with emphasis on safety design and/or safety culture, such as: the NUSHARE project ("Project for sharing and growing nuclear safety culture competence"). More generally the EU Research and Innovation programme (Horizon 2020) will continue to focus research towards safety and security in all domains.

The Joint Research Centre's direct research and training activity focuses on nuclear safety, safeguards and security but also on increasing excellence in the nuclear science base for standardisation and in fostering knowledge management, in line with the policies of the European Union. A mapping exercise between the IAEA and EC activity is ongoing to optimize resources and avoid overlapping activity.

Conclusion

Mr President, Mr Director General, Ladies and Gentlemen,

Nuclear safety, security, and safeguards concern us all: countries which use civil nuclear power as well as those which do not use it. We all need common understanding of relevant issues and close cooperation in resolving them. In nuclear countries this applies both to new build projects and to existing capacities, especially if they are to operate longer than their original lifetime.

We must take full advantage of international organisations and common institutions to continue to develop nuclear power in a safe and sustainable manner. I believe that this conference will further contribute to achieving this objective.

Thank you for your attention.

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中国代表团团长许达哲在国际原子能机构 第 59 届大会上的发言

(2015年9月14日,维也纳)

主席先生,

非常高兴率领中国代表团出席国际原子能机构第 59届大会。首先,请允许我对您当选本届大会主席表示祝贺。我相信,您丰富的外交经验和广大成员国的 共同努力,将使本届大会取得圆满成功。中国代表团 将积极支持您的工作。借此机会,我对刚刚加入机构 的土库曼斯坦、安提瓜和巴布达、巴巴多斯表示祝贺。

过去一年中,机构根据《规约》所赋予的促进核能和平利用和防止核扩散的职能,积极应对能源供应、环境保护、防核扩散、防范核恐怖主义、核安全等方面的挑战,各领域工作均取得了重要进展,赢得了国际社会的广泛赞誉和支持。中国代表团对天野之弥总干事及其领导下的秘书处为此所付出的努力表示赞赏,对机构一年以来的工作感到满意。

主席先生,

2015年是中国核工业创建60周年,也是中国大陆

首座核电站一秦山核电站开工建设30周年。经过60 年的艰苦奋斗,中国核能事业发展取得显著成效,建 立起了一套完整自主的核工业体系,造就了一支高水 平的核科研、设计和建造队伍、实现了核电自主化、 系列化、规模化发展,截至2015年8月,中国大陆在 运核电机组 26 台, 总装机容量约 2469 万千瓦; 在建 机组 25 台,总装机容量约 2900 万千瓦,占全球在建 总数量 4 成以上。今年 5 月和 8 月,中国自主研发的 三代核电技术—"华龙一号"的国内首堆和国外首堆 分别正式开工,标志着该技术的先进性、成熟度、经 济性等已得到广泛认同。与此同时,中国自主研发的 大型压水堆 CAP1400 和小型多功能堆 ACP100 等核电技 术研发也进展顺利,具备了工程实施的条件。大会期 间,中国相关企业将在位于机构大厅的中国展位和有 关边会活动中展示这几项技术的独到之处,欢迎各国 同事和朋友届时前往。

在商用核电项目稳步推进的同时,中国的核能研发工作也取得令人满意的进展,中国实验快堆运行良好,高温气冷堆示范工程建设顺利推进,超临界水冷堆、核聚变装置等先进核能系统研发取得积极进展。为确保中国核能可持续发展,中国国家原子能机构还加大了对燃料循环领域研发和能力建设的投入力度,燃料循环整体能力和水平大幅提升,不仅能满足自身

发展需要,还可满足部分国际市场需求。中国核技术应用领域也在不断扩展,产业化进程不断加快,社会效益和经济效益日益凸显。

中国核能高效安全发展的总体态势,在帮助自身 实现减排目标、优化国家能源结构、促进经济社会发 展等方面作出重要贡献的同时,也为"后福岛时代" 全球核能发展注入强劲动力。

主席先生,

中方始终支持机构按照《规约》赋予的职责,在防止核扩散和和平利用核能两大领域平衡开展工作,并赞赏总干事近年来提出的"原子用于和平和发展"的理念。多年来以来,中方一直本着"有取有予"的原则,与机构在核能、核技术、核安全、核安保等级域开展全方位合作,始终按时足额缴纳机构会费和技术合作基金,并在全球经济复苏乏力、自身面临经济下行压力的背景下,继续为机构不断提供额外捐款、实物捐赠和免费专家等支持。考虑到机构核技术实验室改造项目捐赠一套价值250万美元新型辐照系统的基础上,将再向该项目提供200万欧元的额外捐款,用于实验室的基础设施建设、设备采购以

及专家服务。我呼吁其他国家也能为机构该项目提供 更多额外捐款,力争使机构能早日拥有一个功能完善、 技术先进的现代化核技术应用实验室,以更好地为成 员国提供所需服务。

主席先生,

核安全是核能可持续发展的基石。福岛核事故后,中国政府迅速采取有效措施,对全国核设施进行全面安全检查,并借鉴福岛核事故经验提出改进措施,确保在运和在建核设施安全可控。中国全面参与机构"核安全行动计划"下的各项活动,切实履行自身职责,不断加强和完善自身的核安全监管和核应急管理体系。今年6月,中国国内举行了"神盾-2015"核应急演习,全方位检验中国应对核事故的响应机制和能力。中国正在全面加强法制建设,《原子能法》已经进入立法审查程序,有望在2016年发布。

核安保是机构的一项重要法定职责,中国一直积极支持机构在核安保领域发挥主导作用,并全面参与机构旨在提升全球核安保水平的努力。我们很高兴地注意到机构在推动国际核安保合作方面开展了大量工作,其核心作用和领导地位已得到国际社会广泛认可。为进一步加强提升中国核安保能力和水平,中方拟邀

请机构对华开展国际实物保护咨询服务,有关工作和 具体安排正在磋商中。

为兑现中国对加强全球核安保工作所做的承诺,中国正加快推进有关微堆低浓化工作,其中,国内微堆低浓化改造项目进展顺利,已启动高浓铀堆芯卸出工作,预计2015年底前完成低浓铀堆芯入堆和调试。自中国、机构、加纳三方去年签署《关于为研究堆协助供应低浓铀的协定》以来,国际微堆低浓化工作总体执行顺利。该项工作完成后,有关经验将会用于其他国家的微堆低浓化努力。

中国积极参与包括核安全峰会在内的其他国际核安保合作机制,并按照习近平主席提出的"发展与安全并重、权利与义务并重、自主与协作并重、治标与治本并重"的核安全观,努力履行自身义务,全面提升自身核安保能力。目前,中美核安保示范中心建设进展顺利,预计今年底前建成投运,届时该中心将成为促进亚太地区乃至全球核安保技术交流与培训的重要平台。

主席先生,

多年以来,机构为防止核武器扩散、维护世界和 平做出了重要的贡献。中国高度赞赏国际社会防核扩 散的努力,坚定支持机构旨在提高核保障监督体系的 有效性和保障监督效率的努力,并积极参与国际和地 区防核扩散进程。

为了更好地和平利用核能、造福全人类,中国加大了核能领域的对外合作,先后与 28 个国家和国际组织签订了政府间协定,核贸易数量不断增加。针对中国核能对外合作不断扩大的新形势,中国国家原子能机构一方面严格按照《核出口管制条例》和《核两用品出口管制条例》,对各项出口活动进行严格审查,另一方面,根据国际防扩散形势和新技术发展,及时对相关条例和技术清单进行调整,有效地履行了自身承担的国际义务。

主席先生,

中方对今年7月六国和伊朗达成的"联合全面行动计划"以及机构与伊朗就未决问题达成的路线图表示欢迎,中方认为,这再次表明对话与协商是解决国际分歧的有效途径,对维护国际核不扩散体系和促进全球和平利用核能事业发展具有重要意义。"联合全面行动计划"和"路线图"达成后,大量工作亟待落实,这需要有关各方做出共同努力。

中国作为联合国安理会常任理事国、机构指定理

事国和伊核谈判的重要参与方之一,一直以公正、客观和建设性态度积极参与六国与伊朗的谈判,并为机构在伊开展相关核查活动累计提供了230万元人民币额外捐款。

中方将与有关各方一道,继续支持机构根据安理会 2231 号决议和全面协议开展相关核查活动,并为全面、及时、有效落实"联合全面行动计划"各项内容做出自己的努力。

主席先生,

福岛核事故已过去 4 年有半,在机构、广大成员国以及其他国际组织等共同努力下,国际社会正对核能的安全利用重拾信心。作为机构成员国和明确继续开展核能和平利用的国家之一,中国将进一步加强与机构和其他成员国的合作,在确保核安全和防止核扩散的前提下,积极推动核能多双边国际合作,一方面,从政治、财政、技术以及人力资源等方面,为机构履行自身义务提供更多支持,另一方面,加强并扩大与广大成员国的全方位、多层次互利合作,分享经验,共同发展,努力使核能这个人类二十世纪最伟大的发现之一,继续为人类和平、安全和繁荣带来福祉!

谢谢主席先生!