Special Event "Assurances of Supply and Non-Proliferation"– September 19, 2006, IAEA Anne Lauvergeon, Chairman of the AREVA Executive Board

Chairman, Director General, Ladies and Gentlemen, I am very honored to be here before you this morning.

I would like to begin by thanking Dr. Elbaradei for always getting industrial players involved in the work of the IAEA when their experience can help find effective solutions both for non-proliferation and safety.

1. The importance of non-proliferation for nuclear development

The nuclear industry places great importance on non-proliferation, primarily for ethical reasons, but also because it is essential to the acceptance – and therefore the sustainable development – of nuclear power.

Non-proliferation is one of the basic principles behind the civil nuclear industry

President Eisenhower's vision of Atoms for Peace has largely become a reality. Civil nuclear power has undergone major development worldwide. Today, some 443 reactors generate electricity, and numerous research reactors are operating across the globe. Let us not forget the other fields that use nuclear power applications such as medicine, agriculture, industry and the food industry.

The IAEA has fulfilled its dual mission of promoting the development of civil nuclear and ensuring that nuclear materials are not misappropriated for non-peaceful means. It is therefore not surprising that, almost fifty years later in 2005, the work of the Agency was awarded the Nobel Peace Prize.

At the dawn of this the 21st century, nuclear energy is attracting renewed attention due to the growth in electricity demands and the reality of climate change. Now more than ever, non-proliferation is essential in this era of civil nuclear renaissance.

2. Responsibility of players in the fight against proliferation

If we look at the main players in non-proliferation we will see that responsibility falls first and foremost with individual States.

The origins or causes of proliferation have always been politically or geopolitically motivated, even if the "proliferators" have been able to find more mercenary means of supply when necessary. Putting a national and international framework in place to combat proliferation is therefore a job for governments. This is also true for the Non-Proliferation Treaty, IAEA guarantees, and directives from the Group of Nuclear Suppliers, the role of the Security Council, etc.

This institutional framework obviously applies to industrial players, whose primary role is to apply the rules. Of these, the nuclear industry is on the front line, as it produces, treats, distributes and uses fissile materials in its facilities and develops associated technologies.

Industry has heavy responsibilities in that it must ensure that reactors have a supply of nuclear materials and fuel cycle services, while complying with the constraints and rules linked to non-proliferation.

We must also recognize – though perhaps it is not my place to say – that industry has been successful in pulling off this dual role.

And when it comes to strengthening even further these supply assurances, industry is able to offer its experience as an operator and contribute to setting up pragmatic and effective solutions which actually work.

3. Industry's approach to strengthening supply guarantees

It is in this spirit that industry wanted to propose ways of meeting the objective set by the international community to favor the development of nuclear energy worldwide while avoiding the dissemination of sensitive technology, enrichment and reprocessing.

A Working Group was set up within the World Nuclear Association with the active participation of nuclear utilities - the end customers - and the industrial players in the nuclear fuel cycle or, in other words, their suppliers.

The findings of the group were published last spring and widely distributed. I believe that the group uncovered some elements which have proven useful as a basis for further reflection and for determining solutions, in particular with regard to enrichment.

Industry opted for an approach based on two elements:

1. Firstly, it is up to industry players in the nuclear cycle to supply the market under safe, fair and competitive conditions.

The reality today is that the market comprises a certain number of enrichers, some of which are operating as international centers and which have the required capacity to meet world market requirements for the foreseeable future.

But these enrichers are engaged in fierce competition with huge investments at stake (AREVA with Georges Besses II, URENCO in Europe and the US and the international center project in Russia as S. Kirienko mentioned this morning).

It is worth mentioning that utility customers claim to be satisfied with the current operation of the market and are anxious to avoid any move which could lead to imbalances or additional costs.

We believe that this is essential: assuring the supply of nuclear materials and services depends first and foremost on markets running smoothly.

- 2. Secondly, should a supplier State refuse an enricher an export permit for reasons other than the customer State's failure to meet non-proliferation obligations:
 - a. The other market suppliers could, in a show of solidarity, supply the customer of the enricher so that the operation of its reactor is not threatened. This is a kind of "reassurance" provided by industrial players, which is collectively guaranteed by all supplying States.
 - b. In such a case, the IAEA would of course be responsible for ensuring compliance with non-proliferation rules. The Agency could also facilitate implementation of the mechanism without ever getting directly involved on the market.

I won't go into any further details on how the mechanism works as this will be addressed during this conference. However, I would like to add two points which I consider essential:

- To make this approach even more attractive to customers, supplier States should seriously consider granting general or pre-programmed export licenses which guarantee deliveries over a long period of time, such as the duration of a reactor's service life. Such licenses would be voided only in the event that non-proliferation was called into question.
- Furthermore, governments would have to recognize that this collective assurance mechanism offered by enrichers is compatible with international trading rules (WTO, European Union, national regulations, etc.).

Finally, if States decide that stockpiles are required as a last resort, then such stocks must be managed in such a way that, were they to be used, there would be no market imbalance.

In any case, I would like to emphasize that, at a time when the IAEA is about to look at the proposal it has received by enricher States, industry remains at its disposal to draw up the conditions for implementing the selected schemes.

4. Managing used fuel

The management of used fuel is another sensitive issue in the nuclear fuel cycle.

Today, certain countries and utilities have opted for treatment and recycling while others prefer to stock their used fuel as is.

In the longer term, most fourth generation nuclear systems will probably use a closed-loop cycle. Fast breeder technologies will become widespread and new treatment processes will be discovered. This is the GNEP vision of the DOE that Dennis Spurgeon, Deputy Secretary to the DOE presented earlier.

In any case, the revival of the nuclear energy industry inevitably reinforces the issue of treatment and recycling, which significantly reduces the volume and radiotoxicity of waste while saving up to 30% of natural uranium under current conditions.

As for enrichment, providing guaranteed access to treatment and recycling centers to those who so wish should meet the expectations of customers who do not have such plants at home.

In the same field, industry offers concrete solutions and the means to meet current demand. Furthermore, should demand increase, improved technologies are available for future investment. This is the case for example with the COEX process developed by AREVA and CEA which avoids separating plutonium.

Industry is ready to meet increases in demand while complying with non-proliferation rules. For individual states, this means authorizing the transfer and transport of used fuel to be treated abroad, promoting the use of recyclable materials and regulating the future of ultimate waste packaged during treatment, including sending this back to the country of origin of the used fuel when required by the law.

5. Conclusion

To conclude, I would like to insist on three points:

- Industry gives the utmost importance to non-proliferation by complying with regulations and the national and international directives in force, and also by disseminating non-proliferation culture and practices among its teams.
- Industry takes action by implementing safe and suitable industrial tools and by continuously seeking and developing new technologies which offer better resistance to proliferation.
- Industry undertakes to offer practical solutions, drawing on its experience and knowledge of how the markets work, with a view to implementing effective solutions.

Ladies and Gentlemen, I sincerely hope that the ideas we bring to strengthen supply assurances will help to meet your non-proliferation objectives and to promote the development of nuclear energy for the good of us all.

Thank you for your attention.