

# Speech by Commissioner Miguel Arias Cañete at ENSREG Nuclear Safety Conference

Brussels, 30 June 2015

Ladies and Gentlemen,

It is a pleasure to join you at this 3<sup>rd</sup> ENSREG Conference on Nuclear Safety today.

It is an invitation I had no hesitation in accepting. Not only does it give me an opportunity to meet you all together for the first time, but it allows me to underline the importance I attach to nuclear safety.

Today I will speak about:

- 1) the role that Nuclear energy can play in the Energy Union, in particular when it comes to investing in safety,
- 2) the challenges we are facing in terms of managing radioactive waste, and
- 3) investment and research in the nuclear field in the future.

But allow me to start by saying that safety is, and always will be, my number one priority when it comes to nuclear. The work you do as regulators and safety authorities brings a major contribution to making Europe a world leader. I urge you all to continue this work and I know this conference is another step to improving cooperation among Member States' authorities and regulators.

## **1. Energy Union and EU safety framework**

The Energy Union's overarching goal is clear - to provide Europe's citizens and businesses with the secure, sustainable, and affordable energy they need.

But there are a number of obstacles which stand in our way:

First, our very high import dependence on unreliable energy suppliers. We currently import more than a billion euros worth of energy every day.

Second, we have a disjointed internal market which costs us about 40 billion euros a year in opportunity cost.

And third, our ambition to address climate change and making our energy system more sustainable. We are just a few months away from defining climate talks where the EU hopes to secure a global, binding climate agreement. In response to a more serious climate problem than ever before, we have pledged to be more ambitious than ever before. That means a 40% reduction in greenhouse gas emissions, a minimum of 27% of renewables in our energy system, and at least 27% improvement in our energy efficiency. And all of that by 2030.

In this sense, the Energy Union responds to these challenges by focusing on five priority dimensions:

- 1) energy security, solidarity and trust;
- 2) a functioning, fully integrated internal energy market;
- 3) energy efficiency,
- 4) decarbonisation,
- 5) research, innovation and competitiveness.

Nuclear energy can play an important role across all of the dimensions of the Energy Union. In fact, half of EU Member States use nuclear energy for electricity generation, representing a share of nearly 30% of the EU's electricity. That accounts for 50% of the EU's low carbon electricity.

The point is that any solution to our wider energy challenges has to factor in nuclear, if we want to be realistic. The electricity produced from nuclear power plants constitutes a reliable source of base-load, low carbon electricity, and plays an important role in energy security and contributes to meeting the EU's decarbonisation targets. Overall electricity generation is envisaged to significantly increase in the EU from now on to 2050 but EU nuclear generation capacity is expected to remain stable.

Yes it's true that at European level we are neutral towards the different energy sources. That includes nuclear too. But as I said earlier, my number one priority is that **nuclear safety is not compromised**.

Almost half of our Member States chose to use nuclear energy, so the Commission's role is to ensure that this is done within a legal framework that ensures: (a) the highest standards of nuclear safety, (b) the highest standards of radiological protection for the workers and the public, (c) the appropriate treatment of radioactive waste in the medium and long term.

Our legal framework relies on the Euratom Treaty and has been significantly strengthened since the Fukushima nuclear accident.

Following the Fukushima nuclear accident, the EU undertook comprehensive stress tests for its nuclear installations which included neighbouring countries like Ukraine. We took a careful look at the results and they confirmed that EU installations are safe and operate at the highest standards but that there is room for improvement and this has to be explored to the maximum without any complacency. The implementation of the recommendations and peer reviews is now on-going.

It is important that the process and the commitment to nuclear safety stays credible and that we don't lose any momentum in fully implementing all recommendations without delay.

The EU has **amended the Nuclear Safety Directive**, which will need to be implemented by August 2017. Peer reviews have now become a permanent feature of our approach to safety.

We have introduced an ambitious EU-wide safety objective for all types of nuclear installations to reduce the risk of accidents and avoid large radioactive releases. That will have a global impact through the recent Vienna Declaration on the Convention of Nuclear safety.

The revised Council Directive laying down **basic safety standards for protection against the dangers of exposure to ionising radiation**, was adopted end 2013. That will have to be implemented by the Member States by February 2018 and will bring the highest level of protection of workers, patients and the general public across Europe. Its primary purpose is to ensure a **better coordination** of the various tasks related to radiation monitoring, prevention and post-incident actions. Such tasks involve a large number of authorities in each Member State. Therefore, a key objective is to bring all national legislation under one legal act so to ensure transparency and coherence. Another key component is to ensure that each Member State develops and submits an "Emergency Response Plan".

Five years after Fukushima, the strengthening of the national Emergency Preparedness and Response Plans is a key action that Europe has to ensure and a central demand of the civil society. We appreciate very much the report done by Nuclear Transparency Watch in this area and we are planning to work closely with the civil society and involve them in the period leading to the transposition of the Directive, including in the workshops and events organised by the Commission, where civil society and local communities will be asked to participate.

This new work builds on a solid experience in coordination in this field. ECURIE is an EU wide system of information sharing for radioprotection authorities that has served Europe well for example during the Fukushima accident. EURDEP is another example of EU wide coordinated efforts to monitor radiation on a continuous basis in coordination with neighbour countries willing to work together. It shows that European coordination can bring concrete benefits.

## **2. Radioactive waste**

Finding a final solution to manage our radioactive waste and spent nuclear fuel has for long been given lower priority. As our Nuclear Power Plants were young, decisions were postponed by Member States to avoid sensitive debates. But as Europe's nuclear capacity comes to age we will soon be moving to a new stage in the industry, which means the back end of the fuel cycle will have to get substantial more attention. Investment in this area by operators will have to increase and difficult political decisions have to be made regarding long term geological disposal.

The new Radioactive Waste Directive which Member States had to implement by August 2013, has now set a binding legal framework requiring Member States to move away from "wait and see" policies. Like for Emergency Preparedness and Response, Member States have to prepare and submit National Programs which are well-funded and which set out how they will manage their radioactive waste and spent fuel in a safe, comprehensive and responsible manner.

Transposition of the Directive has taken place in all but three member states. The Commission is expected to receive the National Programs from all member states by this August and it plans to examine them thoroughly and organise peer reviews.

There are a few issues that are important to focus on in the Radioactive Waste Directive:

(a) operators are fully responsible for the responsible management of radioactive waste all the way from generation to final deep geological disposal;

(b) funding has to be accumulated by the operators from the early years of operation and be ring-fenced from the operation of the plants so as to avoid the risk of financial liabilities for governments. We plan to pay particular attention on these two aspects in our forthcoming PINC report.

We intend to remain vigilant and ensure a full implementation of the Directive within the envisaged deadlines.

Through these legislative changes, the EU has set itself the highest standards for safety worldwide, and we are now actively exporting and promoting these internationally. The EU has been a driving force in the recent Diplomatic Conference discussions on the revision of the **Convention on Nuclear Safety**. It has kept a single voice and has ensured a commitment to the highest standards in the post Fukushima world.

### 3. Investment and research

But it is also worth recalling that Europe is a global leader in other areas. We lead the way in the provision of technology for the construction of nuclear power plants, for medical nuclear applications and for nuclear research and innovation. European companies in this sector, both large and small, create jobs and growth in Europe but also play a crucial role in the safe operation of nuclear plants and applications world-wide. Nuclear energy is part of the current SET Plan, where safety aspects and Generation IV technology are being funded. The Commission intends to continue funding research in the fission energy under the new SET Plan with emphasis on safety and security aspects. We will also examine the opportunities in the medical applications of nuclear.

Ladies and Gentlemen

As I mentioned before, over the next decade we will see significant structural changes in the nuclear energy sector. European capacity is ageing and significant investments are needed. Either to ensure longer term operation of existing plants for a certain period, or in order to build new plants in Member States that wish to continue relying on this source of low carbon energy.

The whole fuel cycle will continue to require investment and attention.

Therefore, as part of the Energy Union, the Commission will publish a **Nuclear Illustrative Programme (PINC)** by the end of the year. It aspires to contribute to a discussion on longer term investment planning for new nuclear power generation capacity and on the necessary investment in the long term operation of existing nuclear plants and in the back-end of the fuel cycle.

In the period up to the PINC publication, I would like to get more clarity on the following questions:

- Can investment become more easy and affordable if regulators cooperate more in the coming years to ensure a safer and faster approach to long term operations?
- Can investment become more efficient if regulators cooperate more in the licensing process of new build? In particular for new models of reactors, where it would make a lot of sense for all of you to put your limited resources together and work closely to learn from the experience of each other.
- Can suppliers in the nuclear industry develop a minimum of standardisation in the various components – or to be realistic in some of the components - in the supply chain so as to reduce costs and licensing time? Can suppliers work closer in this area like suppliers in other industries have done successfully in the past while maintaining competition?
- Last but not least: can operators ensure that budget and time overruns are reduced in the future so as to increase credibility at a time of much needed investments for our safety in Europe?

## **Conclusion**

Ladies and Gentlemen,

Nuclear energy can only live up to its challenges, to its role in the overall energy system, if nuclear safety stays at the centre of our political and technical attention. That is why it has its place in the Energy Union.

We, the EU, the Member States, the nuclear regulators and safety authorities need to remain vigilant. It is not enough to be satisfied with what has already been achieved, but we need to be critical of the status quo. We must be ambitious when it comes to safety at home and abroad.

You are the vanguard when it comes to doing that.

I thank you for that work and I look forward to working closely with you all over the next months and years.

Thank you for your attention.