PERSPECTIVES OF EUROPEAN HARMONIZATION OF NUCLEAR SAFETY APPROACHES

by

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INTRODUCTION

Ladies and gentlemen,
I am honoured to have been invited to this symposium on the harmonization of nuclear safety approaches.

The European Union is on the eve of a new -adventure with an enlargement to 10 Member States and the prospect of a European Constitution. A new social contract is taking shape in Europe. This attests once again that the method launched by Jean Monnet was, and remains effective.

In an integrated energy market there is an obvious need for a Community approach in the field of nuclear safety. This need is made more urgent by the imminence of the enlargement of the European Union.

THE NEED FOR A COMMUNITY FRAMEWORK: FOR NUCLEAR SAFETY

The European Union of 25 Member States will comprise 161 power reactors including 22 of Soviet design, operated in 14 Member States. This is without taking into account other nuclear facilities such as research reactors, enrichment or waste storage facilities etc.

Nuclear power represents one third of the electricity produced in the European Union- Nuclear power production increased more quickly over the last fifteen years than overall electricity production. The year 2002 saw the highest production of electricity from nuclear power in the history of Europe.

Between now and 2025 nuclear power will represent almost one fifth of the electricity consumed in the Union.

A significant number of nuclear facilities are arriving to the end of their operation lifetime. Between now and 2025 about fifty reactors could be decommissioned in Germany, Belgium, Great Britain, the Netherlands as well as in Lithuania, Slovakia and Bulgaria.

Nuclear activities are not without risk. They are the subject of important controls for the fight against proliferation of nuclear weapons as well as for the protection of persons and the environment against the dangers of ionizing radiation.

On the fight against proliferation of nuclear weapons the European Commission plays a key role with a body of over 250 inspectors monitoring all civilian nuclear installations in the Union.

However, nuclear safety has not benefited until now from a European control system. This gap has to be filled.

The number of reactors, their design disparities as well as the various schools of nuclear safety controls calls for a Community legal framework in the field of nuclear safety. This framework will make it possible to attest that an equivalent high level of nuclear safety is maintained within all the Member States of the enlarged Union.

The approach proposed by the Commission is to give force of law to internationally recognized principles. Their implementation will have to be adapted to the reality of the Community and should respect the principle of subsidiarity.

THE COMMISSION PROPOSALS

In 1957 the European Communities founding fathers considered that the development of atomic energy should be controlled and developed specific provisions in the Euratom Treaty. These provisions focused primarily on safeguards and non-proliferation. However, the European Court of Justice confirmed only last year that a clear Community competence can also be exercised in the field of nuclear safety.

Since the Chemobyl accident in 1986, the need for a common approach to nuclear safety had been stated several times by the European Council.

It was the European Council of Laeken two years ago that called for the highest level of nuclear safety in the enlarged Union. To meet this request, the recent accession negotiations which closed m Athens last April definitively embedded nuclear safety in the Community sphere by including a provision concerning nuclear safety in Accession Treaties.

The Commission made on 30 January 2003 two proposals for nuclear safety standards And the management of nuclear waste which are now on the table of the Council.

The primary objective is to give force of Community law to general principles unanimously accepted on the international scene and in particular within the International Atomic Energy Agency, to which all the Member States of the enlarged Union are parties.

Thus, the international conventions on nuclear safety and on the safety of spent fuel and of radioactive waste, adopted under the aegis of the IAEA, largely inspired the texts of the two proposals for Directives, adopted by the Commission.

The Commission, like the IAEA, considers that it is advisable to cover nuclear safety as a whole: all civil nuclear facilities (from their design to their end of lifetime) and radioactive waste that is the inherent consequence of the use of this form of energy.

Three fundamental topics for nuclear safety are dealt with by the proposals for Directives:

- The safety of nuclear facilities
- The decommissioning of nuclear facilities arriving at the end of their lifetime
- The safe management of spent fuel and of radioactive waste

These three topics covered by the proposals prepared by the Commission are dealt with in accordance with Community law respecting the principle of subsidiarity.

THE SAFETY OF NUCLEAR FACILITIES

To ensure the maintenance of a high level of nuclear safety within the Member States **the Commission envisages the adoption of a peer-review monitoring system** making it possible to attest that the national safety authorities comply as much as possible with their mission. This system will rely on the skills of the experts of the Member States without a Community body of permanent inspectors being necessary.

The reviews carried out by the safety authorities are modelled on the method which was developed at the time of the evaluation of nuclear safety in the applicant countries and which proved its effectiveness. It is appropriate that it is systematized and extended to the enlarged Union of 25. I wish moreover to stress that all Member States validated this methodology and the recommendations which were sent to the candidate countries.

Thus, the Directive strengthens the prime national responsibility of maintaining nuclear safety based on a double principle: the operators' responsibility and the responsibility for control of the national nuclear safety authorities.

The Peer review at Community level supplements this according to two different complementary methods. On the one hand, the cross- check review of the national safety authorities within a Community framework. On the other hand, the adoption of a reporting system and of peer-review meetings similar to what exists in the international convention on nuclear safety.

In my view, the principle of **controlling the controllers** and the publication of a safety report will have an essential political consequence. It means a qualitative improvement

for the transparency of the work of the national safety authorities. This system should make it possible to deliver a genuine European label of nuclear safety.

THE FINANCIAL RESOURCES INTENDED FOR DECOMMISSIONING

Nuclear safety cannot be guaranteed without adequate financial resources as stated by the. International Nuclear Safety Convention, adopted under the aegis of the IAEA- Among the' amounts which are advisable to preserve, those intended for decommissioning are the most important ones and the most at risk. Indeed they have to be maintained and developed for over 40, or even 60 years, before the decommissioning of a nuclear installation.

And they have to be protected from the uncertainties which may arise during this period of time concerning the industrial operators' durability in a changing electricity market.

The costs related to decommissioning operations call for a considerable financial engagement. The amounts involved in order to achieve the rehabilitation of a site of a nuclear power plant can be very high. The decommissioning costs represent almost one fifth of the investment and can vary according to our estimates between 200 million euros and more than one billion euros.

In consequence, the Commission considers that:

- the financial resources for decommissioning need to be built up during the operational period of a nuclear facility
- they have to reach a sufficient level and
- they have to be available for the purpose for which they have been established so as to cover, at the appropriate time, all expenses related to decommissioning.

These provisions are even more essential in the enlarged Union. I will not hide from you that certain countries have not provided for the necessary amounts in time.

It is up to the Member States to determine details of the way in which they are managed.

We can not forget that the provisions on the financial resources have a decisive effect with respect to the internal electricity market and to the avoidance of distortion of competition - a problem which has been address already by the European Parliament.

THE MANAGEMENT OF SPENT FUEL AND OF RADIOACTIVE WASTE

The draft Directive on radioactive waste management endeavors to catch up the lack of timely planning by the majority of the Union's Member States on finding solutions to the disposal of radioactive waste.

It is not acceptable for public opinion that for 50 years nuclear waste has been accumulating in intermediate storage sites without sustainable solutions being worked out. Moreover, policy waste was in the past for the majority of the candidate countries, to return the waste to the USSR.

The delay observed in numerous Member States concerning the identification and the authorization of suitable sites, in particular for the disposal in deep geological sites, is alarming. The volumes of irradiated nuclear fuel and of temporarily stored radioactive waste continue to grow. These storages require monitoring and maintenance activities in order to ensure a high level of safety and environmental protection. Otherwise it would be an unacceptable burden for future generations and would impede to go on with a nuclear option in the future.

Final disposal in deep geological sites of long life and highly radioactive waste is the subject of a technical consensus at international level. According to the current state of knowledge, this is the best solution to isolate radioactive waste from people and the environment. However, other solutions might be possible. The Commission intends to close no door and is guided only by the aim of ensuring a safe and sustainable radioactive waste management.

The proposal for a Directive asks the Member States to adopt, according to a pre-established timetable, national programmes for the management of radioactive waste. They will be required to take a decision for the choice of the site (national or regional) in 2008 and to make the site operational in 2013, for low activity waste. For highly radioactive waste the system should be more flexible in order to take into account the constraints, technical and political, inherent to that type of disposal site, even if we are

ready to negotiate the concrete target date with the Council. The Community must have the assurance that all the Member States address the situation adequately.

The Commission still considers that the adoption of a credible radioactive waste management policy must contain deadlines, m the European Union only Finland and Sweden have set up such a programme in the field of management of highly radioactive waste.

Whatever the solution adopted for the ultimate waste disposal, it is essential to continue and reinforce research programmes in the field of waste management so that new technologies for waste reduction could emerge.

Accordingly, the financial engagement for this type of research has to be maintained, and even increased in certain Member States, and more effective cooperation is necessary between the various research programmes, since progress in this field is in the interest of the entire Union. Establishing a framework for improved cooperation and coordination in this field will increase the overall profitability of the efforts, the credibility and the acceptability of all work.

CONCLUSION

The objective of the Commission's legislative proposals is to guarantee a high level of nuclear safety within the enlarged European Union. The implementation of this Community legislation will also enable the European nuclear industry to evolve within a stable, uniform legal framework for all the nuclear power plant operators without discrimination.

Contrary to what some would like to make believe, the Commission proposals will not have as a result to destroy the national systems or to weaken them. On the contrary, these legislative initiatives confirm and strengthen the principles and the prime responsibilities for the operators and for the national safety authorities.

Finally, allow me to stress that transparency in nuclear safety and radioactive waste management are a prerequisite for maintaining long term secure electricity supply in the enlarged Europe.

The consequences of the implementation of the internal electricity market are important for the nuclear sector. With the opening of the EU electricity market in 2007,

460 million consumers will be able to choose their electricity supplier freely in Europe. The diversification we need in Europe must be supported by confidence of consumers. A legally-binding Community instrument is the only option which will give sufficient assurances to European citizens regarding a high level of nuclear safety within the enlarged European Union.

Finally, with regard to the different positions of the Member States and the European Parliament among other opinions, let me say that the Commission adopts a flexible approach in the negotiations with the Council in order to reach a satisfactory compromise for all Member States in the general interest of the European Union.

Let me to conclude with the statement that, as established in the Green Paper for Security of Energy Supply, we can not avoid nuclear energy if we want to reach the Kyoto targets. We need to maintain the nuclear option open, but we have to give all the assurances to the citizens. This means above all more transparency.

I thank you for your attention.