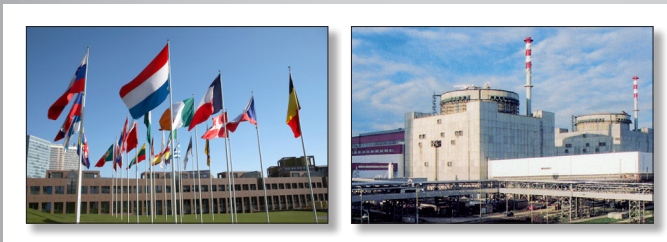


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NUCLEAR ENERGY AGENCY

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June 2010
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The Momentum of the European Directive on Nuclear Safety

From the Complexity of Nuclear Safety to Key Messages Addressed to European Citizens

*by Yvan Pouleur and Petr Krs**

Foreword by Dominique Ristori, Deputy Director-General, European Commission

Nuclear safety is and remains an absolute priority for the European Union.

In line with citizens' expectations, a fundamental step was made in 2009 when the EU adopted a binding legal framework for nuclear safety, thereby bringing legal certainty and providing appropriate guarantees to the public. The EU is the first major regional nuclear actor in the world to have such legally binding safety rules, constituting a model for other countries.

In this context, I welcome and express my thanks for the initiative taken by Messrs. Yvan Pouleur, Director at the Belgian Federal Agency for Nuclear Control, and Petr Krs, Deputy Chairman of the Czech State Office for Nuclear Safety, to analyse and describe the evolution of the new nuclear safety directive.

They have both been key actors during the whole adoption process. Accordingly, they are particularly well placed to comment and explain the dynamics of the European negotiations which led to the successful adoption of the directive.

Dominique Ristori

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The authors alone are responsible for the facts and opinions expressed in this article.

On 25 June 2009, when the Council of Ministers of the European Union approved the Directive on Nuclear Safety,¹ an important step forward was taken to enhancing the nuclear safety framework within the European Union. The mere reading of the directive does not allow for a full understanding of the complex context leading to such a step and the delicate balance between political and technical rationales underlying the text.

This paper intends to present the key issues of the directive: a summary of the institutional context, the international framework in the field of nuclear safety developed in fora such as the International Atomic Energy Agency (IAEA), the basic principles of nuclear safety and the compromises that were necessary to finally reach consensus on the text. The goal of the authors is to offer an objective and accurate analysis that could be used for the interpretation and better understanding of the directive.

The authors wish to thank Mr. Ristori for his comments on the paper and for accepting to write the foreword.

Part I Context

Chapter 3 of the Treaty establishing the European Atomic Energy Community (Euratom Treaty) was initially considered as covering solely radiation protection while the interpretation of its scope was progressively extended to some degree, particularly with respect to nuclear safety.

It should be recalled that it was the landmark decision handed down by the European Court of Justice (ECJ)² on 10 December 2002³ which gave new momentum to this dossier. Indeed, the European Commission (EC) had appealed against a Council Decision in connection with the accession of Euratom to the Convention on Nuclear Safety (CNS). The EC maintained that the competencies conferred by the Euratom Treaty were adequate to permit the European Atomic Energy Community (EAEC) to communicate to the Depositary of the CNS [Article 30(4) of the CNS] that more provisions, particularly those concerning the regulatory framework, apply to it. The Court supported the EC in that it agreed to the extension of the declaration as regards the articles dealing with nuclear safety (Articles 7, 14 and 16 to 19 of the CNS), while stating at the same time that:

- There was no need for the EAEC to have competencies covering the totality of an article of the CNS in order to enable it to include it in its accession declaration. One part, albeit small, would suffice.
- This decision is in no way to affect the precise division of competencies between the EAEC and the member states.

Highly legalistic in nature, this decision gave rise to various interpretations regarding the legitimacy of EC initiatives in the field of nuclear safety. While the EC felt strengthened by the ECJ's

1. Council Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations, approved by the Permanent Representatives Committee (COREPER II) on 24 June and by the Council of Ministers on 25 June in the Environment Council. It was published on 2 July in the *Official Journal*, O.J. L172/18 and is to be transposed by 22 July 2011.

2. Since the entry into force of the Lisbon Treaty: "Court of Justice of the European Union".

3. *Commission v Council*, C-29/99.

judgement some member states insisted on the strict division of competencies and the sole responsibility of member states for nuclear safety.

At the beginning of 2003, the EC decided to submit to the Council the draft legislation which it had adopted internally in November 2002, consisting of two draft directives: one concerning nuclear safety and decommissioning funds and the other the safe management of radioactive waste. This set of directives is better known as the “nuclear package”.

It should be recalled that this file opened a Pandora’s box which the member states had kept closed for a long period of time. Apart from some member states which traditionally and regularly oppose the extension of EU competencies, a majority of member states feared that national and international systems would be jeopardized and duplicated by the tabled directive, particularly at the level of responsibilities and through the establishment of standards which were considered as barely relevant. At that time, the perception of some member states was that the EC wished to develop a centralised system equivalent to that in place for safeguards of nuclear material, set out in Chapter 7 of the Euratom Treaty, which paradoxically was subject to EC proposals aiming at decreasing the Commission’s central role.

Following the submission of the nuclear package, very difficult negotiations were held at the Council’s Atomic Questions Group (AQG) which spanned over a period of 18 months and in June 2004, under Irish Presidency, led to the adoption of Council Conclusions (10823/04) aimed at progressively finding solutions. In this sense, the conclusions state in particular:

The Council urges both the EC and the member states to engage in a wide ranging consultation process facilitating the choice of instrument(s) that can contribute more effectively to achieving nuclear safety and the safe management of spent fuel and radioactive waste, without excluding any instrument.

The AQG got down to the business of implementing the Council Conclusions, and on the basis of a work plan (15955/04 – December 2004), assigned to its ad hoc working group, the Working Party on Nuclear Safety (WPNS), the task of implementing this plan which started by drawing up a more detailed work plan (05574/04 – March 2005). An extensive study was then carried out by the WPNS and its three subgroups. The outcome of this work, at the end of December 2006, was a complete report showing the status of the harmonisation of nuclear safety practices, including the three main areas: safety of nuclear installations, radioactive waste management and decommissioning funds (15475/2/6). Member states’ activities and achievements under the auspices of the following international organisations and associations were examined in detail: IAEA, OECD Nuclear Energy Agency (NEA), Western European Regulators Association (WENRA) and the EC. It clearly showed that the international system in the analysed fields was already well developed and that a considerable degree of harmonisation had been achieved by member states under these fora. Proposals were then made to further develop these international co-operation mechanisms, and it was suggested that a high-level group be set up consisting of senior representatives of the safety authorities.

On this basis in April 2007, under German Presidency, the AQG agreed on new Council Conclusions (5407/07) which were adopted by the Council in May 2007. The key idea was to hand over the lead to the representatives of the safety and waste management authorities since, according to the results of the WPNS as described above, they had been identified as being best placed to make useful proposals to the EC and to enhance the harmonisation of approaches in the field of nuclear safety. It should be pointed out that, at the time, this represented a genuine recognition of the responsible authorities and their position as the main, indispensable players. The success of the work undertaken by WENRA was undoubtedly an important factor in this sense.

In its 2007 Communication on “[A]n Energy Policy for Europe”,⁴ the EC announced its intention to establish an EU High Level Group on Nuclear Safety with the mandate to progressively develop common understanding and, eventually, additional European rules on nuclear safety. This proposal was endorsed by the European Council in March 2007. The European High Level Group on Nuclear Safety and Waste Management was set up by EC Decision of 17 July 2007.⁵

This High Level Group, later renamed the European Nuclear Safety Regulators Group (ENSREG), began its work in October 2007.

It would be a euphemism to state that the launching of this group was laborious. Of course, the responsible authorities congratulated themselves for being in a position to take matters in hand, but the prospect of being the promoter or destroyer of the European draft directive left many members in a very uncomfortable situation. However, thanks to a relationship based on mutual trust amongst the senior regulators, which had developed over the period of many years of shared work within WENRA as well as numerous other international fora, a balanced work programme emerged. It concentrated on measures intended to develop harmonised approaches within the EU, based on the existing international structures. Some attention was given to the consideration of a possible re-cast directive. The group also devoted a complete section to transparency and the distribution of information.

In addition, the EC, with the support of the European Council, set up the European Nuclear Energy Forum (ENEF)⁶ which was intended to create a discussion forum on energy that would allow all the stakeholders involved in nuclear power and its development (for or against) to hold an open and transparent debate on nuclear energy on the opportunities and risks of nuclear energy. Talks held within ENEF clearly revealed the concern for guaranteeing a high level of safety for existing installations or, *a fortiori*, for new builds. Some players and the EC saw in the establishment of a Community framework for nuclear safety an essential condition for the future development of the nuclear sector.

Strengthened by a favourable atmosphere, strong political motivation and time pressure due to the approaching end of the EC in charge, the EC decided to table a revised draft directive at the ENSREG meeting in October 2008. Moreover, time constraints led to the adoption of an aggressive planning by the EC, announcing its intention to present the draft to the Council within the next one or two months. Hence, the ENSREG quickly established ten principles which it felt should be integrated in a directive in this field (see Annex I) and in the days which followed, it delivered comments on the EC draft, of which the EC took considerable note, following a constructive extraordinary meeting on 7 November 2008.

Reference should also be made to the EC’s impact assessment relating to the revised legislative proposal on nuclear safety⁷ retracing the background of the draft directive with a view to clarifying and justifying its initial proposal.

The French Presidency then in charge took the matter over in the AQG for three working sessions which ensured continued momentum with a view to adopting directives. The ensuing Czech

4. Communication from the Commission to the European Council and the European Parliament – An Energy Policy for Europe, COM(2007)1 final.

5. 2007/530/Euratom.

6. Inaugurated in Bratislava, the Slovak Republic, on 26/27 November 2007.

7. SEC(2008) 2892.

Presidency started to carefully consult with delegations and then to progressively restructure the draft directive, in close co-operation with the EC. It was quickly able to put together the necessary elements to form a directive which would meet the following primary objectives:

- strengthen the role of the safety authorities;
- respond to the strong political pressure to create a Community framework in the field;
- not duplicate or compromise the national systems and the international framework already in force;
- deliver a self-supporting legal instrument limiting the need of additional initiatives in the field.

This initial step was essential to provide for the adequate balance between political messages and a rigorous content and structure. Indeed, it was clear that this new instrument must find its place in the existing nuclear safety framework and reinforce it. This phase was also required in order to acquire a better view of what member states were ready to accept.

Part II

A. November 2008 draft submitted by the EC

On 26 November 2008, the European Commission adopted a draft proposal for a directive on nuclear safety.⁸ The complexity of the context as described above entailed difficulties that would have to be tackled when examining the draft proposed by the EC. The EC draft was rather ambitious in order to provide an adequate answer to the European public's expectations. It was structured as follows:

- a. Responsibility and framework for the safety of nuclear installations
- b. Regulatory bodies
- c. Transparency (towards the public)
- d. Safety requirements and regulations for nuclear installations
- e. Obligations of licence holders
- f. Supervision (of licence holder)
- g. Nuclear safety expertise
- h. Priority to safety
- i. Reporting

8. Commission Proposal for a Council Directive (Euratom) setting up a Community framework for nuclear safety [COM(2008) 790 final].

Its scope and objectives were rather wide. A preliminary examination showed where improvement could be achieved taking advantage of the expertise of national safety authorities.

First, it was seen as beneficial to better clarify between *objectives* and *obligations*. It was indeed essential to establish an objective for the directive and then to list the measures which member states should take to achieve it. Otherwise, more disputes could be brought before the ECJ, as feared by some member states. The CNS offers a good example of compliance with this principle.

Secondly, in order to ensure compliance with the principle that the prime responsibility for safety lies with the operator, specific attention had to be given to Article 3, dealing with responsibilities. It stipulated that the regulatory bodies decide on the practical safety measures to be implemented, while in reality it is the operators who propose these measures to meet the objectives laid down by the regulatory bodies, who again decide whether these proposals are sufficient or not.

Thirdly, Article 4 was discussed in detail as it was notably aiming at ensuring that the regulatory body is “effectively” independent; however, the measures to be taken to achieve this objective presented a real challenge. The CNS does not require the full independence of the regulatory body since it is impossible to achieve for constitutional reasons. Article 4(5) required that “[a]t least every ten years the regulatory body shall submit itself and the national regulatory system to an international peer review aimed at continuously improving the regulatory infrastructure”. The idea expressed in this article of making international peer reviews of the regulatory bodies obligatory was indeed good. However, it would have been more acceptable if the terms and conditions of such a review, its scope and its objectives were also defined so as to avoid uncertainty.

Fourthly, most difficult were the discussions with respect to Article 6 since it (a) made the obligations and requirements incorporated in the CNS binding from the point of view of the Community legislation, (b) made the IAEA’s Safety Fundamentals, Fundamental Safety Principles⁹ binding and (c) foresaw the application of principles, yet to be developed by WENRA, to new reactors.

- a. This idea may seem attractive since both Euratom and all member states are contracting parties to the CNS, but the application of the CNS once directly and once through Community legislation meant that in case of a dispute, the question of the competent court would raise problems. Moreover, the CNS is an incentive instrument which only obliges contracting parties to comply with reporting and participation obligations. The principles are only subject to peer reviews every three years (Articles 5 and 20 of the CNS).
- b. While all member states acknowledge the value of the Safety Fundamentals, a majority maintain that they cannot be transposed directly into a binding text, such as a directive, in that they were not established for this purpose and hence confuse objectives and the means of achieving them. Indeed, each of these principles is accompanied by a sometimes lengthy explanation which specifies either the context or how to understand, interpret or apply the principle. This difficulty, identified relatively early on, led to the proposal that some bodies (i.e. ENEC) should develop new principles at the European level. This option, however, gave rise to more concern, since the two international systems would be in competition, denying the IAEA’s primacy in developing these standards, a position so

9. IAEA Safety Standard Series No. SF-1 2006.

far unquestioned. It was also probable that the development of the actual standards would take many years.

- c. The specific criteria which would be applied to new reactors were based on the highly respectable desire to raise the level of safety. However, it would in the first place be difficult to find an agreement on how to define what a new reactor is (a reactor which is to be built, a reactor which has not yet received a licence, a reactor at the design stage?). Secondly, the question was raised as to how the application of not yet existing criteria can be made obligatory in a legal text. Delegating a *carte blanche* to WENRA, a group lacking an international mandate, was unacceptable both legally and politically to those states who were not member of it (i.e. all member states without nuclear power plants).

Finally, Articles 7 and 8 concerning the licence holder and its supervision were based on some important principles and required to be completed with other relevant CNS and Safety Fundamentals principles. The conditions governing the suspension of operations and the revocation of the licence required clarification with respect to the legal basis and the justification to take such enforcement measures.

B. Commentary on the final directive (2009/71/Euratom)

On 26 May 2009, the AQG finally reached consensus as regards the content of the directive. The European Parliament and the European Economic and Social Committee endorsed the proposal which entered into force on 22 July 2009 after adoption by the Council and publication in the *Official Journal of the European Union*.¹⁰

I. Legal basis

Directive 2009/71/Euratom is based on Article 31 of Title II, Chapter 3 (“Health and Safety”) of the Euratom Treaty. Articles 30 and 31 of the Euratom Treaty provide for the Community, following the opinion of a scientific group of experts, to adopt basic standards for health protection for the general public against the dangers arising from ionizing radiations. Discussions on the extent of this competency and the distinction between the radiation protection and the nuclear safety *acquis* are regularly dismissed with reference to the ECJ’s case law that the Community shares competences, together with its member states in fields covered by the CNS.¹¹

II. The recitals

The directive starts with an extensive recitals section featuring 22 references to:

- the Euratom Treaty and secondary legislation in that field (Nos. 1-3 and 7);
- ECJ judgments and interpretations (Nos. 4-6);
- the Convention on Nuclear Safety (No. 8);
- national responsibilities and policy statements (Nos. 8-12 and 18-20);

10. OJ L 172 of 2 July, the text of the directive is reproduced in *Nuclear Law Bulletin* No. 84 (2009/2), pages 139 *et seq.*, see also Garribba, M., Chirteş, A., Naudizaite, M., “The Directive Establishing a Community Framework for the Nuclear Safety of Nuclear Installations: The EU Approach to Nuclear Safety”, *ibid*, pages 23 *et seq.*

11. Commission v Council, C-29/99, recently reconfirmed in Land Oberösterreich v ČEZ, C-115/08.

- the IAEA’s Fundamental Safety Principles and its International Regulatory Review Service missions (Nos. 13 and 21);
- WENRA reference levels for power reactors (No. 14);
- ENSREG’s establishment, its possible contribution and its ten principles (Nos. 15-17);
- the interinstitutional agreement on better law-making (No. 22).

Recitals are designed to introduce the actual text of a piece of legislation; they have only limited legal implications but serve to explain the context and help to understand the underlying spirit and interpretation of the text. They do so in a different way than the “explanatory memorandum” of the EC since the recitals are drafted and adopted by the Council of Ministers of the European Union which is the main “legislator” in the fields covered by the Euratom Treaty. Particularly in the context of the directive at hand, it is interesting to note that some elements which have not been successfully integrated into the actual text can be found, as a compromise, in the recitals so as to remind member states of the underlying notion, e.g. the reference to “new” reactors was removed from the directive and finds mention in Recital No. 18.

III. The corpus of the directive

The directive consists of three chapters. The first (Articles 1 to 3) includes the objectives, the definitions and the scope of application, the second (Articles 4 to 9) covers the obligations and the third chapter (Articles 10 to 12) the final provisions. This structure was adopted based on the CNS in order to make a clear distinction between the obligations of the member states and the objectives. It was also adequate to relieve certain tensions in the negotiations as some member states feared that without that distinction the obligations would be subject to broad interpretation.

Unlike the initial draft [Article 6(2)], the final version does not include the concept of a new reactor. The only evidence of measures to be taken for future reactors is to be found in Recital No. 18 recommending that the member state take account of, *inter alia*, technological advances and lessons learned from operating experience when extending their nuclear power programme or deciding to use nuclear power for the first time.

A directive is binding on the member states as to the result to be achieved. However, it leaves them the choice of the form and method they adopt to realise the Community objectives within the framework of their internal legal order.¹² Due to the nature of EU directives and for the sake of clarity, all obligations are directed at the member state. It is on them to transpose and apply the relevant obligations to the players concerned, e.g. licence holder, regulatory authorities etc.

The obligation to observe the requirements of the CNS [see Article 6(1) of the initial EC draft] was, for the above mentioned reasons, not maintained in Chapter 2 of the directive. Reference is, however, made to the CNS in No. 8 of the recitals reinforcing particularly the principle of the prime responsibility of the operator under the supervision of the regulatory body.

12. Garribba, M., Chirteş, A., Naudizaite, M., “The Directive Establishing a Community Framework for the Nuclear Safety of Nuclear Installations: The EU Approach to Nuclear Safety”, *op. cit.*, page 32.

Even without direct reference, the principles of the main international instruments available, especially the CNS, are included in the core of the directive, as indicated in the chart below.

CNS	Directive 2009/71/Euratom
1	1
7	4
8	5
9	6(1)
10	5(3), 6(4)
11	6(5)
14	6(2)

The relevant IAEA Safety Fundamentals (Fundamental Safety Principles No. SF-1) formed the subject of a memorandum from the Council to study the various options; namely, to make no reference to them at all, to include them as an attachment or to state them in the text. In the end, the third option was chosen, thus avoiding legal problems. The AQG also opted to make use of the current revision of the IAEA Safety Standards Series “Governmental and Regulatory Framework for Safety” (Doc. DS 415) and the Safety Requirements “Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety” (GS-R-1) which are also relevant given the area of application of the directive.

The table below indicates the correspondences between the relevant IAEA Safety Fundamentals and the articles of the directive.

IAEA Safety Fundamentals	Directive 2009/71/Euratom
1	6(1)
2	4(1), 5(1)
3	6(4)
5	6(2)
8	6(3)
4,6,7	n.a. (are mostly covered by directive 96/29)

Article 1: Objectives

The objectives of this Directive are:

- (a) to establish a Community framework in order to maintain and promote the continuous improvement of nuclear safety and its regulation;*
- (b) to ensure that member states shall provide for appropriate national arrangements for a high level of nuclear safety to protect workers and the general public against the dangers arising from ionizing radiations from nuclear installations.*

The directive under (a) explicitly indicates that the objective is above all to establish a Community framework in this less developed field of nuclear safety. This objective is in line with ENSREG's Principle No. 1 to be integrated in a Nuclear Safety Directive (see Annex I) in that the framework shall serve to maintain and promote the "continuous improvement of nuclear safety and its regulation".

All attempts by certain member states to extend these objectives were rejected since those would have given the impression that the member states are not doing enough in this respect and had therefore to be obliged at the Community level. It is in this vein, and to exclude all possibility of doubt, that the recitals in No. 11 explicitly state that member states have already implemented measures enabling them to achieve a high level of nuclear safety in the Community. Recital No. 10 further recalls that all principles developed in an international framework must be transposed in light of the specific national circumstances.

The suggestion by some parties to include environmental protection in the objectives met with the obstacle of the limited scope of the Euratom Treaty which deals with the protection of human beings. However, Recital No. 5 recalls the fact that the ECJ has confirmed that the measures taken in the framework of Chapter 3 of the Euratom Treaty form a coherent whole conferring upon the Commission powers to protect both the population and the environment against risks of nuclear contamination, the environment being protected to the extent that this contributes to the protection of human beings.

Article 2: Scope

- 1. This Directive shall apply to any civilian nuclear installation operating under a licence as defined in Article 3(4) at all stages covered by this licence.*
- 2. This Directive does not prevent member states from taking more stringent safety measures in the subject-matter covered by this Directive, in compliance with Community law.*
- 3. This Directive supplements the basic standards referred to in Article 30 of the Treaty as regards the nuclear safety of nuclear installations and is without prejudice to Directive 96/29/Euratom.*

The scope and definition of the directive in Articles 2 and 3 are to be read together.

The initial proposal was to explicitly include all stages or steps of the installations covered by the directive (design, siting, construction, operation, shutdown, decommissioning, storage of waste etc.). This, however, raised the problem of determining which national body is in charge of regulating and supervising the respective steps, given that some of them needed no monitoring or authorisation. The original design, for example, is not subject to inspection by an authority at an early stage, this aspect is often examined when a licence is sought for the construction and operation of the full project.

For this reason the idea emerged to define under Paragraph 1 the scope as to apply to *any civilian nuclear installation operating under a licence as defined in Article 3(4) at all stages covered by this licence*. The decisive criterion is thus the licence and its scope. Article 3(4) then incorporates the stages of the installations in detail. The fact that the definition of licence clearly refers to the jurisdiction of member states allows for the necessary leeway for each member state to incorporate the various stages of the installations into its national licensing system in the form it deems necessary.

It is not necessarily a characteristic of the scope of a piece of legislation to allow for the possibility of more stringent measures, see Paragraph 2. Certain member states, however, needed to be reassured that the directive constitutes a minimum basis. It is another expression of the member state's ambition to achieve the highest possible safety standards. It acknowledges that the standards in this directive can only be the minimum framework which member states must achieve. Provisions at the international level often face criticism since they are a result of difficult negotiations and at the end represent the lowest common denominator. This point is reinforced by Recital No. 6. With regard to the implementation of basic safety standards, the ECJ has ruled that once such standards have been defined at the Community level, a member state may provide for more rigorous protections.¹³

Paragraph 3 is standard and aims at legally and politically rooting nuclear safety in the scope of application of the Euratom Treaty, particularly as regards Chapter 3 which is mainly devoted to basic standards which until now have mostly focused on aspects of radiation protection.

At this stage, it is important to emphasise the essential overlap between the scope of application, the definitions and the operational articles (particularly Articles 4, 5 and 6). The definition of the competent regulatory authority may illustrate this point. Article 3(3) of the directive is incomplete without the reading of the specific obligations and duties described in Article 5 of the directive. In particular, the duties associated with respect to the licence shed light on the definition of a licence and hence on the scope of application of the directive. This technique of "cross-referenced stabilisation" could again provide for greater flexibility when it comes to transposing it to the national system.

With the successive compromises during the negotiations, the relation between these three pillars, adopted independently, is not yet perfectly clear and will on occasion give rise to questions of interpretation. However, the three chapters can be seen as a whole, genuine and consistent framework that is satisfactory.

Article 3: Definitions

For the purposes of this Directive the following definitions shall apply:

- 1) *"nuclear installation" means:*
 - (a) *an enrichment plant, nuclear fuel fabrication plant, nuclear power plant, reprocessing plant, research reactor facility, spent fuel storage facility; and*
 - (b) *storage facilities for radioactive waste that are on the same site and are directly related to nuclear installations listed under point (a);*
- 2) *"nuclear safety" means the achievement of proper operating conditions, prevention of accidents and mitigation of accident consequences, resulting in protection of workers and the general public from dangers arising from ionizing radiations from nuclear installations;*

13. See Commission v Kingdom of Belgium C-376/90.

- 3) “competent regulatory authority” means an authority or a system of authorities designated in a member state in the field of regulation of nuclear safety of nuclear installations as referred to in Article 5;
- 4) “licence” means any legal document granted under the jurisdiction of a member state to confer responsibility for the siting, design, construction, commissioning and operation or decommissioning of a nuclear installation;
- 5) “licence holder” means a legal or natural person having overall responsibility for a nuclear installation as specified in a licence.

As far as possible, the definitions have been modelled on those of IAEA texts. The drafters have chosen to define nuclear installation, nuclear safety, competent regulatory authority, licence and licence holder which is more extensive than the definitions in the CNS which define nuclear installation, regulatory body and licence only.

Nuclear installation

The definition of the nuclear installation in Article 3(1)(a) is essential as it largely helps to determine the scope of application of the directive. Only at the very end of the negotiations, a compromise could be reached in this respect. The installations covered are those of the nuclear fuel cycle, including research reactors and installations for the storage of spent fuel. Installations for the storage of radioactive waste are included insofar as they are located on the same site as a nuclear installation and are directly connected with these installations, Article 3(1)(b). The reason for this wording is the difficulty to clearly identify the installations which should fall under the scope of this directive. Some member states were worried that installations for storing mining waste, for example, might be included. It would also have been necessary to agree upon a precise definition of radioactive waste.

It was even less likely to reach a compromise regarding the inclusion of installations for the (final) disposal of radioactive waste. This matter had both technical and political connotations which divided the member states. Some wanted to send a clear message to the public guaranteeing that these installations would be subject, from a Community point of view, to the same attention as other installations. On the other hand, it is true that there is a variety of storage/disposal installations requiring quite different safety considerations, regulatory treatment and technical/operational approaches. By incorporating these installations, the directive could have become quite complex, losing its focus. These arguments were, of course, not entirely baseless, but they also concealed a desire to not give too much to the EC. A directive relating to radioactive waste, which is likely to follow in the very near future,¹⁴ will have to tackle these questions. Nevertheless, Recital No. 12 was inserted to re-state the fact that these installations must also be subject to safety measures.

Nuclear safety

The main instrument in the field of nuclear safety, the CNS, does not include an explicit definition of this notion. It is the framework in its entirety which should lead to the understanding of this abstract technical and legal term. The definition in the directive is based on the IAEA Safety Glossary,¹⁵

14. On 31 March 2010, the EC launched public consultation for a possible legislative proposal on the management of spent fuel and radioactive waste asking for public comment by 31 May 2010.

15. IAEA Safety Glossary, Terminology used in nuclear safety and radiation protection, IAEA, Vienna, 2007.

however, without reference to the protection of the environment for the above mentioned reasons concerning the scope of the Euratom Treaty.

Competent regulatory authority

The definition of the competent regulatory authority in Paragraph 3 also strained negotiations right until the very last session. In actual fact, the definition of the regulatory authority had to be adapted depending on the final scope of the directive as well as the practical provisions. In addition, the connection with the licensing procedure proved extremely difficult to establish because the disparities between the member states proved to be great. Moreover, there is often more than one authority involved in the issuing of a licence (especially in federal states). The definition finally adopted is based on a principle common to international and Community law: the authority, of which there may be more than one, is designated by the member state as being active within the scope of application and more specifically, entrusted with the application of the provisions of Article 5.

Licence and licence holder

Licence and licence holder are important notions in nuclear law since the licence is an important administrative act allowing for the conduct of various nuclear activities and since the licence holder has the prime responsibility for the safety of a nuclear installation [Article 9 of the CNS; Article 6(1) and Recital No. 8 of the directive]. The definitions are again based on the IAEA Safety Glossary with slight modifications, especially to emphasise the sole jurisdiction of member states.

Article 4: Legislative, regulatory and organisational framework

1. *Member states shall establish and maintain a national legislative, regulatory and organisational framework (hereinafter referred to as “the national framework”) for nuclear safety of nuclear installations that allocates responsibilities and provides for coordination between relevant state bodies. The national framework shall establish responsibilities for:*
 - (a) *the adoption of national nuclear safety requirements. The determination of how they are adopted and through which instrument they are applied rests with the competence of the member states;*
 - (b) *the provision of a system of licensing and prohibition of operation of nuclear installations without a licence;*
 - (c) *the provision of a system of nuclear safety supervision;*
 - (d) *enforcement actions, including suspension of operation and modification or revocation of a licence.*
2. *Member states shall ensure that the national framework is maintained and improved when appropriate, taking into account operating experience, insights gained from safety analyses for operating nuclear installations, development of technology and results of safety research, when available and relevant.*

Article 4(1) reflects both Safety Fundamental Principle 2 (“Role of government”) and Article 7 of the CNS. It covers the basics of a national framework establishing responsibilities for (a) national nuclear safety requirements, (b) a licensing system, (c) a system of nuclear safety supervision and (d) enforcement actions. Unlike the underlying IAEA documents, the directive includes an

organisational element and the need for co-ordination between the relevant state bodies into the definition of the national framework, particularly with a view to the various organisational, governmental and administrative structures at the level of the 27 member states of the European Union.

The peculiarity of the juxtaposition between the header of Article 4(1) which requires the national framework to establish responsibilities and its paragraph (a), where the subject is the adoption of national provisions on safety, reflects an important difference amongst member states' views. Some were hoping for a clearer message and maintained that the member state should adopt these provisions, while others saw grounds for incompatibility with their national systems, which was particularly the case with some federal regimes. It was also felt that the risk of appeal was greater if it was a question of direct adoption. The result aims at fixing responsibilities at the right level while the modalities of implementation are left to the member state.

The second sentence in Article 4(1)(a) is an explicit reassurance in the text of the directive that the determination of how the detailed safety requirements are adopted and through which instrument they are to be applied rests with the competence of the member states; see also ENSREG's Principle No. 3 to be integrated in a Nuclear Safety Directive (Annex I).

Emphasis is specifically placed on the power to suspend or revoke a licence. This point was particularly important for non-nuclear member states which wished to underline the principle of "safety first" that could lead, regardless of the economic issues, to the shutdown of installations if this was thought necessary. The safety authorities of member states with a nuclear power programme saw in this article, in conjunction with Article 5(3)(d), a clear mandate to execute their fundamental mission as the guardians of nuclear safety.

Paragraph 2 of Article 4 is more innovative in that it includes the idea of maintaining and improving the national system based on operating experiences, insights gained from safety analysis as well as the development of technology and research. The obligation to maintain and improve such a framework ensures that member states are not relieved from the obligation to constantly question the appropriateness of their arrangements according to the principle of continuous improvement in Article 1(a). However, this obligation must be interpreted in a flexible fashion with a view to ensuring stable national systems which cannot reasonably come under constant modification if they are to be effective.

Article 5: Competent regulatory authority

1. *Member states shall establish and maintain a competent regulatory authority in the field of nuclear safety of nuclear installations.*
2. *Member states shall ensure that the competent regulatory authority is functionally separate from any other body or organisation concerned with the promotion, or utilisation of nuclear energy, including electricity production, in order to ensure effective independence from undue influence in its regulatory decision making.*
3. *Member states shall ensure that the competent regulatory authority is given the legal powers and human and financial resources necessary to fulfil its obligations in connection with the national framework described in Article 4(1) with due priority to safety. This includes the powers and resources to:*

- (a) *require the licence holder to comply with national nuclear safety requirements and the terms of the relevant licence;*
- (b) *require demonstration of this compliance, including the requirements under paragraphs 2 to 5 of Article 6;*
- (c) *verify this compliance through regulatory assessments and inspections; and*
- (d) *carry out regulatory enforcement actions, including suspending the operation of nuclear installation in accordance with conditions defined by the national framework referred to in Article 4(1).*

Article 5 covers the basics applicable to a national regulatory authority as defined in Article 3(3), its establishment, its independence, its supervision duties and the means to perform them properly. Article 5 also reflects Safety Fundamental Principle 2 (“Role of government”) and notably Article 8 of the CNS.

Paragraph 1

All member states of the European Union have established regulatory authorities in the field of nuclear safety of nuclear installations complying with Article 5(1).¹⁶

Paragraph 2

The principle of independence, a milestone post-Chernobyl concept,¹⁷ is included in Paragraph 2. More than with respect to all other provisions of the directive, lengthy discussions took place to reach agreement on the phrasing of this requirement. Everyone is in agreement on the need for “independent” authorities in the field of nuclear safety, while at the same time recognising that absolute independence is utopian and against the spirit of governmental structures in democracies.¹⁸ It is difficult to describe the (arguable) criteria which must be met to arrive at a regulatory authority which balances the anti-poles. In the end, it was the CNS approach which was adopted, with effective separation being sought between the safety authority and the organisations responsible for using or promoting nuclear energy. These criteria were felt to be sufficient to achieve the desired degree of independence. The CNS approach was however, further elaborated in that the directive defines a clear “means to an end” relation between the concepts of separation and independence: the authority is required to be functionally separate (as opposed to “effective” separation) from any other body or organisation concerned with the promotion or utilisation of nuclear energy in order to ensure effective independence from undue influence in its regulatory decision-making. The requirement is thus not to ensure “effective independence” *per se* since this is impossible to both achieve and to enforce. Member states are rather required to ensure the functional separation by organisational and practical means (“separation of the functions”); the independent decision-making should thereby follow.

16. See their respective reports to the CNS review conferences according to Articles 5 and 20 of the CNS.

17. This debate was also conducted at length during the CNS review meetings in 2002 and 2005, specifically ending up with a distinction being made between *de facto* and *de jure* independence.

18. See Article 8(2) of the CNS, Article 20(2) of the Joint Convention, see points 3.8-3.11 of the IAEA Safety Fundamentals.

Paragraph 3

This paragraph reflects Article 8(1) of the CNS requiring human and financial resources on the one hand and the legal authority/power to fulfil its obligations under Article 4(1) on the other hand. At the end of the first sentence, Paragraph 3 contains a reference, somewhat vague, to give due priority to safety when exercising its powers. This addition was discussed as it is usually applied to operators for which the transposition of this principle is more evident than for regulatory bodies, see Article 10 of the CNS. Nevertheless, it should be mentioned that it is the first time that a binding international instrument contains such reference.

Sub-paragraph (a) ensures compliance not only at the time of the licensing but throughout the lifetime of nuclear installations. The word “relevant” reflects the discussions about the various stages in the licensing procedures and hence refers to licences where compliance is under the responsibility of the safety authority. Sub-paragraph (b) provides that the safety authority must check that the operator complies with the licensing conditions and again states that the particular issues are the measures laid down in Article 6(2) to (5). The point here is to ensure that the control of the conditions imposed on the operator via Article 6 falls within the province of the safety authority. This adds to the legal certainty of the instrument by clearly naming a national organisation responsible for ensuring that these provisions are applied. Sub-paragraph (c) is based on Article 14 of the CNS (“trust, but verify”). Finally, Sub-paragraph (d) refers to Article 4(1) to the extent that it was not possible to reach a compromise on the definition of the criteria involving the suspension of the use of the licence. The reference to the national system offers the necessary flexibility without affecting the principle according to which the safety authority must have the power to suspend a licence.

Article 6: Licence holders

1. *Member states shall ensure that the prime responsibility for nuclear safety of a nuclear installation rests with the licence holder. This responsibility cannot be delegated.*
2. *Member states shall ensure that the national framework in place requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the nuclear safety of their nuclear installations in a systematic and verifiable manner.*
3. *The assessments referred to in paragraph 2 shall include verification that measures are in place for the prevention of accidents and mitigation of consequences of accidents, including verification of the physical barriers and licence holder’s administrative procedures of protection that would have to fail before workers and the general public would be significantly affected by ionizing radiations.*
4. *Member states shall ensure that the national framework in place requires licence holders to establish and implement management systems which give due priority to nuclear safety and are regularly verified by the competent regulatory authority.*
5. *Member states shall ensure that the national framework in place requires licence holders to provide for and maintain adequate financial and human resources to fulfil their obligations with respect to the nuclear safety of a nuclear installation, laid down in paragraphs 1 to 4.*

Article 6 states the prime responsibility of the licence holder (Article 9 of the CNS; Recital No. 8 of the directive) and covers the fundamental requirements which operators should be obliged to respect. It reflects the essence of several Safety Fundamental Principles (1, 3, 5, 8).

As stated in the Safety Fundamental's first principle ("Responsibility for safety"), the prime responsibility of the operator for safety applies throughout the lifetime of facilities and cannot be delegated. The original EC draft foreshadowed the addition of a principle included in the IAEA standards, namely that actions requested or required by the regulatory body did not affect this primary responsibility. However, unlike non-legally binding standards, including such standards into legislation is a more delicate matter.

Paragraph 2 reflects Safety Fundamental Principle 1 (see 3.6) and Article 14 of the CNS combined with the obligation to continuously improve. Licence holders have to regularly assess, verify and continuously improve the nuclear safety of their nuclear installations in a systematic and verifiable manner. The phrase "as far as reasonably achievable" should protect from unreasonable and unachievable measures.

Paragraph 3 ended up being more extensive than expected reflecting the legitimate claim of non-nuclear member states for "defence-in-depth" measures¹⁹ and their wish to ensure a level of visibility of the relevant levels of protection, which have to fail before significant consequences occur.

Paragraph 6(4) is, for a legal text, rather innovative in that it lays down the relatively new principle of the creation and implementation of management systems,²⁰ to be regularly verified by the competent authority. This paragraph reflects to a certain extent the Safety Fundamental Principle 3 ("Leadership and management for safety"). According to the IAEA Safety Glossary management system means "[A] set of interrelated or interacting elements (system) for establishing policies and objectives and enabling the objectives to be achieved in an efficient and effective manner". The requirement to give due priority to safety is an expression of a high safety culture.

Paragraph 5 gave rise to a number of difficulties. There was no doubt that the directive would have to tackle the problem of the necessary resources. On the one hand, both the operator and the regulatory authority [see Article 5(3)] must be allocated with adequate financial and human resources in order to carry out their activities. On the other hand, it is extremely difficult to objectively assess what the necessary and adequate human and financial resources are. In light of the financial stakes, these provisions will require close examination. It should be recalled that within the framework of the transposition of WENRA reference levels for power reactors similar principles have already been subject of wording exercises. Paragraph 5 must thus be understood as a reflection of the principle of sustainability aiming at maintaining licence holders competencies for safety. Again, transposition of this paragraph will (probably) only be possible through the establishment of a general process in national legislation and leave to it to the authorities to indicate good practices to fulfil this general obligation through non-legally binding recommendations.

19. See also Safety Fundamental Principle No. 8 "Prevention of accidents", point 3.31.

20. See also IAEA Safety Standards Series GS-R-3 "The Management System for Facilities and Activities Safety Requirements", IAEA, 2006.

Article 7: Expertise and skills in nuclear safety

Member states shall ensure that the national framework in place requires arrangements for education and training to be made by all parties for their staff having responsibilities relating to the nuclear safety of nuclear installations in order to maintain and to further develop expertise and skills in nuclear safety.

Education, training and knowledge management are the core challenges of the future, recognised all around the world, to tackle the dwindling of knowledge related to the ageing of specialised staff in the nuclear sector. This article aims at urging member states to adopt provisions likely to ensure that the necessary theoretical and practical training is available for staff. Again, it is worth mentioning that there is flexibility in transposing this article. The national framework should only require arrangements for education and training while the addressees of this requirement (e.g. regulatory bodies, licence holders) will take initiatives to choose the “best way” how to comply with the general requirement to have such in place. The corresponding provision in the CNS is Article 11(2) which requests contracting parties to “take the appropriate steps to ensure that sufficient numbers of qualified staff with appropriate education, training and retraining are available for all safety-related activities in or for each nuclear installation, throughout its life”.

Article 8: Information to the public

Member states shall ensure that information in relation to the regulation of nuclear safety is made available to the workers and the general public. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, provided that this does not jeopardise other interests such as, inter alia, security, recognised in national legislation or international obligations.

Transparency, public participation and access to information are important “recent” developments. In Article 8 the directive reflects the trend in civil society to become more involved. The obligation is not new in the nuclear field and reference should be made to the Espoo Convention on Environmental Impact Assessment in a Transboundary Context and the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters which impose broad transparency measures on their respective contracting parties; their scope of application extends to the nuclear field. European legislation on the matter is also well developed, i.e. through Directive 2003/4/EC²¹ on public access to environmental information and Directive 85/337/EEC²² on the assessment of the effects of certain public and private projects on the environment. While the CNS does not oblige its contracting parties to implement transparency measures *vis-à-vis* the interested public, the Safety Fundamentals in Point 3.10 provides for the informing of parties in the vicinity, the public, other interested parties and the information media about the safety aspects. Some member states have sought to set a limit for this transparency, but these actions are more political than legal. The balance between the conflicting notions of transparency and confidentiality of sensitive information is solved in sentence 3 of Article 8.

21. OJ No. L 41, 14 February 2003, pp. 26-32.

22. OJ No. L 175, 5 July 1985 pp. 40-48.

Article 9: Reporting

1. *Member states shall submit a report to the Commission on the implementation of this Directive for the first time by 22 July 2014, and every three years thereafter, taking advantage of the review and reporting cycles under the Convention on Nuclear Safety.*
2. *On the basis of the member states' reports, the Commission shall submit a report to the Council and the European Parliament on progress made with the implementation of this Directive.*
3. *Member states shall at least every ten years arrange for periodic self-assessments of their national framework and competent regulatory authorities and invite an international peer review of relevant segments of their national framework and/or authorities with the aim of continuously improving nuclear safety. Outcomes of any peer review shall be reported to the member states and the Commission, when available.*

The purpose of paragraphs 1 and 2 is to provide some level of visibility of the implementation of the directive, to encourage the member states not to excessively restrict the application of the directive to merely transposing it into national law and above all to enable the EC to make use of the reports for its own reports to the Council and the European Parliament (paragraph 2) and possibly as foundations for new initiatives. This latter point, accurately identified by the member states, finds a response in Recitals Nos. 11 and 17. Recital No. 17 makes reference to the principles established by the ENSREG, particularly the 5th which states that a directive on nuclear safety should “not expand the role of the EC in regulatory decisions making or activities nor introduce other bodies”.

The reference to the CNS entails the possibility to base the reports in the framework of this directive on those drawn up under the CNS (see Article 5 and 20 of the CNS) acknowledging that member states are already under reporting obligations which should not be duplicated at the EU level. The date of the first report corresponds to three years after the transposition deadline and also corresponds to the CNS review meeting, scheduled for spring 2014. In this respect, Recital No. 16 should be remembered which states that a unified structure for reports of member states to the Commission should be established and that ENSREG could make a valuable contribution, thereby facilitating consultation and co-operation of national regulatory authorities. The aim of Recital No. 16 is to designate ENSREG as the body responsible for defining the content of the reports. If it is the regulatory bodies themselves who define the content, there is less likelihood that it will have to duplicate what has already been carried out in other contexts.

Paragraph 3 was subject of serious concern to some member states since it establishes a certain level of regular inspection of both their national framework and the regulatory authorities at a ten-year interval (at least), particularly with respect to the invitation of international peer review teams. While everyone acknowledges the merits of IRRS missions, some member states refused to make them mandatory for fear that it would degrade the effectiveness which comes, above all, from exchanging views between specialists on a voluntary basis in the spirit of openness and transparency (see detailed description in Recital No. 21). The fear behind these discussions was also the spectre of creating the embryo of a centralised European regulatory body, contrary to the principle (firmly grounded in the directive) of the sole national responsibility. It was, however, possible to convince the delegations to include a reference to these missions in the text of the directive. Recital No. 21 concluded the construction of the edifice by defining the actual principles of these missions.

The fear expressed by certain member states that a European regulatory body would develop, even if only over the long term, also explains why no reference has been made in the body of the text to ENSREG or WENRA, even though these two groups are key players in the maintenance and

development of the national systems. Had they been mentioned as central players in the directive, supporting the regulatory bodies in the development of the standards and the exchange of practices, that would have added even greater structure to the European level. The only formal references to these groups can thus be found in Recitals Nos. 14 and 15, drawn directly from the Council's conclusions.

Articles 10, 11, 12

The directive entered into force on 22 July 2009. As a directive, it is by definition addressed to member states (as opposed to regulations) and it must be transposed into national legislation by 22 July 2011.

Conclusions

Given the particularly difficult context, there is some reason to be pleased with the result obtained under the guided authority of the presidency, the participation and commitment of numerous experts from member states and the permanent exchange with the EC. Admittedly, the Pandora's box is open now, but the process has had some positive effects since relations between the EC and member states have significantly improved. Encouraged by this success, the EC is all the more in a position to understand both its limits in the matter and the importance of respecting the principle of subsidiarity in the field of nuclear safety, in keeping with the international system and national practices. Having said that, member states will certainly consider future EC actions more positively.

The negotiation procedure regarding this directive also reveals the importance of the international activities of the regulatory bodies in the nuclear field and the tangled links between the many activities taking place within the European Atomic Energy Community but also on the international scene. By actively participating in these various fora, it is possible to develop a consistent, concerted approach which is bound to be fruitful. A direct link could be made, for example, between the dynamics which have developed over the years in groups such as WENRA and ENSREG and which have resulted in a common understanding of the structure and content of the directive.

Annex I

Principles established by the ENSREG that should be integrated in a Directive on Nuclear Safety

1. Maintain and seek to continuously improve nuclear safety and its regulation, and add value.
2. Just as every MS has a right to decide to use nuclear energy or not, so every member state has a right to impose more stringent nuclear safety requirements than those commonly applied.
3. Allow flexibility and not fundamentally change a MS's national nuclear regulatory approach.
4. Seek to enhance not reduce the power, roles, responsibilities or capability of the national nuclear regulatory body.
5. Not expand the role of the EC in regulatory decisions making or activities nor introduce other bodies.
6. Not divert resources away from national nuclear regulatory responsibilities or international nuclear safety co-operation.
7. Be compliant with the principles/obligations of the CNS.
8. Any proposals should be non-discriminatory to those who use or do not use nuclear energy.
9. Seek to improve the transparency of nuclear safety and its regulation.
10. Be clear on the roles and responsibilities of any organisations involved.

Annex II
Council Documents

	COUNCIL DIRECTIVE 2009/71/EURATOM	
Title	establishing a Community framework for the nuclear safety of nuclear installations	
Publication	PB L 172 p. 18-22, 2 July 2009	EUR-directive2009-071-NL
Eur-lex	CELEX: 32009L0071	
	EN: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:172:0018:0022:EN:PDF	
	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009L0071:EN:NOT	
Entry into force	22 July 2009 (Publication date + 20 days: see Article 11)	
Transposition	Before 22 July 2011 (see Article 10.1)	
Legal base	Euratom-Treaty, Articles 31 and 32	
Reporting	1 st report due on 22 July 2014, after that every three years (see Article 9)	

Chronological Evolution:

Institution	Title, nature and reference of the document	Further references
Initial Proposal of the Commission		
Commission	<p>Proposal for a Council Directive (Euratom) setting out basic obligations and general principles on the safety of nuclear installations</p> <p>Proposal for a Council Directive (Euratom) on the management of spent nuclear fuel and radioactive waste</p> <p>Inter-institutional Dossier No. 2003/0021 en 0022 (CNS)</p> <p>Press information IP/03/132</p>	<p>EUR-COM2003-0032</p> <p>x</p>

	CELEX: 52003PC0032(01) en 52003PC0032(02)			
	EN: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0032:FIN:EN:PDF			
	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52003PC0032(01):EN:NOT			
	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52003PC0032(02):EN:NOT			
Article 31	2 Opinions on the Commission Proposals			x
	19 December 2002			x
EESC	398 th plenary session on 26 and 27 March 2003 (Meeting of 26 March) 2003/C133/15, PB C 133, 06.06.2003, p 70-74			EUR-EESC-2003-C133-15
	EN: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2003:133:0070:0074:EN:PDF			
Council Group ATO	8990/03	ATO095	6 May 2003	x
	9926/03	ATO117	28 May 2003	x
	9962/03	ATO118	28 May 2003	x
	10166/03	ATO122	5 June 2003	x
	10236/03	ATO124	6 June 2003	x
	10236/03 ADD1	ATO124	12 June 2003	x
	10318/03	ATO128	10 June 2003	x
	10538/03	ATO134	16 June 2003	x
EP-Committee	Opinion in the form of a legislative resolution			A5/2003/0441
	Committee on industry, research and energy, 27 November 2003, A5-0441/2003 and A5-0442/2003			
EP	Opinion of the European Parliament			
	Session 13 January 2004, T5-0011/2004 and T5-0012/2004			
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The Independence of the Nuclear Regulator

– *Notes from the Canadian Experience* –

*by Brenda MacKenzie**

The firing of Linda Keen as President and Chief Executive Officer of the Canadian Nuclear Safety Commission provoked considerable debate within Canada and internationally about the independence of the Canadian nuclear regulator. Ms. Keen was dismissed from her position at the height of the crisis over a world-wide shortage of medical isotopes caused by the shut-down of the research reactor in Chalk River, Ontario. Under the terms of its licence, the reactor was required to have two cooling pumps connected to an emergency power supply as a backup in case of a power outage caused by an event such as an earthquake. In November 2007, after it was discovered that the pumps were not connected, the reactor was shut down. As panic over the shortage of medical isotopes grew, the government took three extraordinary measures: first, it issued a directive; second, it introduced emergency legislation in Parliament; and finally, it fired Linda Keen as President of the Commission. This paper examines those three measures and whether they constituted an unwarranted interference with the independence of the Canadian nuclear regulator.

It concludes that the two legislative steps – the issuance of the directive and the passage of emergency legislation by Parliament – were within the competence of the Government to give policy direction to the Commission. Such policy direction undeniably has an impact on the functioning of the nuclear regulator, but if Parliament could validly create the Commission by legislation and define its mandate, it could just as validly provide additional direction to the Commission through new legislation or by authorising a directive to be issued under existing legislation.

The decision to fire the Commission President is another matter. Linda Keen challenged her dismissal in Federal Court but lost. Commission members are appointed “during good behaviour”, which means they can be removed only for cause such as incompetence or wrong-doing. One of those members is designated President, but the court found that designation to be “at pleasure”, meaning the President enjoys little security of tenure. Linda Keen’s dismissal was therefore legal, but the question

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remains: Is it appropriate for the President of the nuclear regulator to have little security of tenure? What does this say about the independence of the Canadian nuclear regulator?

1. The firing of the CNSC President

On 15 January 2008, Linda Keen was removed as President of the Canadian Nuclear Safety Commission (“the Commission”), provoking debate within Canada and internationally about whether the Canadian Government had improperly interfered with the independence of Canada’s nuclear regulator. As in any divorce, an interested and observant outsider might have been able, at least in hindsight, to identify incidents that presaged the ultimate breakdown in the relationship. At the outset, it will be useful to sketch out the key milestones in the establishment and dissolution of the relationship between the President of the CNSC and the Government of Canada.

Linda Keen, a career civil servant, was appointed by the liberal government in power at that time to her first five-year term as a member of the Canadian Nuclear Safety Commission (“the Commission”) on 4 October 2000, by order of the Governor in Council.¹ The Commission is the administrative tribunal that licences nuclear reactors to operate in Canada. At the same time, the Governor in Council designated Linda Keen President of the Commission. Linda Keen was re-appointed to a second five-year term as Commission member on 19 May 2004 and again designated as President.²

One of the reactors licensed by the Commission is the National Research Universal (“NRU”) in Chalk River, Ontario, operated by Atomic Energy of Canada Limited (“AECL”). AECL is a Crown corporation, meaning that it is entirely owned and controlled by the Government of Canada rather than private interests. The Chalk River reactor is more than half a century old but performed a crucial service in supplying more than half of the world supply of nuclear isotopes for the diagnosis and treatment of cancer.

Under the terms of its licence, the Chalk River reactor was required to have two cooling pumps connected to an emergency power supply as a backup in case of a power outage caused by an event such as an earthquake. In November 2007, it was discovered that the pumps were not connected and the reactor was shut down. The resulting shortage of medical isotopes provoked a political crisis in Canada and concern around the world. AECL and the Commission discussed various options to resolve the crisis, including operating the reactor with only one pump connected to an emergency power supply or leaving the reactor shut down until two pumps could be connected.

On 5 December 2007, the Minister of Natural Resources of the Conservative administration now in power intervened, requesting the Commission and AECL to work together to resolve the matter. The Commission advised AECL that, in order for the reactor to be permitted to operate with only one back-up pump, a safety case would have to be made, and offered to vary its procedural rules to expedite the hearing that would be necessary.

On Saturday, 8 December 2007, the Minister requested that a hearing be convened immediately so that the reactor could be restarted. Ms. Keen advised that she was waiting for an application by AECL. On

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1. “By order of the Governor in Council” means, in the Canadian context, “by order of the Executive branch of the Government” or “by order of Cabinet”.
 2. The chronology of events is described in the court case *Keen v Canada (Attorney General)*, 2009 FC 353 (CanLII). The case can be found electronically at <http://www.canlii.org/en/ca/fct/doc/2009/2009fc353/2009fc353.html>.

Sunday, 9 December 2007, AECL told the Commission that it could submit its safety case by the close of business on Thursday, 13 December 2007.

As panic over the shortage of medical isotopes grew, the government decided not to wait any longer and took three extraordinary measures: first, it issued a directive; second, it introduced emergency legislation in Parliament; and finally, it fired Linda Keen as President of the Commission.

1.1 The Directive

On 10 December 2007, the Governor in Council issued the following brief Directive³ which requires the Commission to “take into account” the need for medical isotopes in performing its role of preventing unreasonable risk to human health.

Directive to the Canadian Nuclear Safety Commission Regarding the Health of Canadians

1. In regulating the production, possession and use of the nuclear substances in order to prevent unreasonable risk to health of persons, the Canadian Nuclear Safety Commission shall take into account the health of Canadians who, for medical purposes, depend on nuclear substances produced by nuclear reactors.
2. This Directive comes into force on the day on which it is registered.

On the face of it, the directive was a soft instruction, merely requiring the Commission to “take into account” – or turn its mind to – the health of Canadians who depend on nuclear substances produced by nuclear reactors. The directive did not require the Commission to make any particular licensing decision, or to do anything more than take dependence on nuclear substance like isotopes into consideration. The fact that the Government chose to issue a directive at all was, however, exceptional.

The power to issue a directive is found in Section 19 of the Nuclear Safety and Control Act (“NSCA”),⁴ the legislation which establishes the Commission and sets out its objectives and powers. This power to issue directives is not without precedent in Canadian legislation. Section 89 of the Financial Administration Act,⁵ for example, authorises the Government to issue directives to Crown corporations like the AECL if it is “of the opinion that it is in the public interest”. Since there is generally no desire to interfere in the affairs of Crown corporations or administrative tribunals, directive powers are rarely exercised and, if they are, can be expected to elicit significant comment. Their exercise may very well be seen as a rebuke. Before the isotope crisis, the Government had never issued a directive to the Commission under the NSCA.

The power to issue a directive serves two functions: first, the Commission is compelled by the NSCA to comply; and second, the Commission is shielded from responsibility for complying. If a party were to dispute an action taken in accordance with a directive, its argument would not be with the Commission but rather with the Government (the Governor in Council) on the basis that it had exceeded its powers under Section 19 of the NSCA.

3. SOR/2007-282, found electronically at <http://laws.justice.gc.ca>.

4. Statutes of Canada 1997, Chapter 9. The NSCA can be found electronically at: <http://laws.justice.gc.ca/PDF/Statute/N/N-28.3.pdf>.

5. Revised Statutes of Canada, 1985, Chapter F-11. The electronic version of the FAA can be found at <http://laws.justice.gc.ca/PDF/Statute/F/F-11.pdf>.

The directive power in the NSCA does not give the Government *carte blanche*, in particular, it does not authorise the Government to intervene in any particular licensing matter. Rather, it authorises the Government to issue policy direction and clarification to the Commission. The power to issue directives in Section 19 of the NSCA reads as follows:

Directives

19. (1) The Governor in Council⁶ may, by order, issue to the Commission directives of general application on broad policy matters with respect to the objects of the Commission.
- (2) An order made under this section is binding on the Commission.
- (3) A copy of each order made under this section shall be
 - (a) published in the Canada Gazette; and
 - (b) laid before each House of Parliament.

The power given by the NSCA to the Government to issue directives is not unlimited. A directive is subordinate legislation and, like any other regulation made under the authority of an act of Parliament, may not exceed the scope of the grant of power given in the act. The key limits in Section 19 on the exercise of the directive power are that:

- it must be of “general application”, that is, it must apply to regulatees in general and not to any particular licensing decision;
- it must be “on broad policy matters”, again reinforcing the concept that it cannot relate to any particular licensing decision; and
- it must be “with respect to the objects of the Commission”, that is, that it be tied to the Commission’s mandate under the NSCA.

A directive could not expand the powers enjoyed by the Commission under the NSCA; rather, the directive-making power allows the Government to clarify a policy direction for the Commission to take in exercising powers it already had under the NSCA. Any directive that purported to go beyond that scope would be invalid.

The “objects of the Commission” referred to in Section 19 are set out in Section 9 of the NSCA, and relate to the protection of the environment, health, safety and security. A key object of the Commission is to regulate the development, production and use of nuclear energy and the production, possession and “use of nuclear substances” in order to “prevent unreasonable risk to the environment and to the health and safety of persons”. Medical isotopes are nuclear substances within the meaning of the NSCA.

The directive that was issued did not require the Commission to take any specific action to reopen the Chalk River reactor, nor could it have. It required the Commission, in fulfilling its role of preventing unreasonable risk to human health, to take into consideration the health of those dependent on medical isotopes when making its licensing decisions. It is true that this expanded the role which the Commission

6. The “Governor in Council” is a term used in Canadian legislation to refer to the Executive branch – Members of Cabinet and the Prime Minister.

had performed prior to the issuance of the directive. The Commission had until then focused on other obvious health concerns, such as protecting workers, those living near a reactor and the environment from radiation from the reactor. It was implicit in the issuance of the directive that the Government took the view that the Commission had the power to take additional health concerns – the health of Canadians dependent on medical isotopes produced by the reactor – into account in making its licensing decisions. The directive required the Commission to take into account those additional health concerns but left the Commission free to decide that those additional health concerns should not alter its decision in any particular case.

In the context of the Chalk River reactor shutdown, the directive would require the Commission to weigh or balance factors that it had previously not considered: What is the risk to the health and safety of Canadians who require medical isotopes for cancer diagnosis and treatment? Does that risk outweigh the risk to Canadians of having only one back-up pump connected to an emergency power supply for a period of time? For the Commission, this was a new and unfamiliar question. However, following the issuance of the directive, the Commission did not argue that it could not or should not exercise that responsibility.

1.2 The emergency legislation

On 11 December 2007, the day after the directive was issued and the same day that it was tabled in the House of Commons as required by Section 19 of the NSCA, the Government introduced Bill C-38 “An Act to permit the resumption and continuation of the operation of the National Research Universal Reactor at Chalk River”. It is an indication of the general air of crisis surrounding the shutdown of the Chalk River reactor that, in a fractious minority Government situation, the Government was able to obtain the unanimous consent of all parties to introduce the emergency legislation in Parliament. Bill C-38 passed both Houses of Parliament with astonishing speed and was assented to the next day, on 12 December.⁷ It received the support of governing conservatives, as well as opposition liberals, the New Democratic Party and Bloc Québécois, though not without debate. The bill’s preamble reflects the concerns that brought about this unlikely consensus of Parliamentarians of various political stripes:

- Whereas Atomic Energy of Canada Limited is the operator of the National Research Universal Reactor at Chalk River, a reactor that is the major producer of medical isotopes in Canada;
- Whereas that reactor has been shut down for maintenance purposes and Atomic Energy of Canada Limited is prohibited from resuming the operation of the reactor until conditions of its licence relating to earthquake-proof backup units have been complied with;
- And whereas the shutdown has created a serious shortage of medical isotopes in Canada and around the world and is putting the health of Canadians at risk.

The bill, like the directive, was so brief that it can be reproduced in full here:

1. (1) Atomic Energy of Canada Limited may resume and continue the operation of the National Research Universal Reactor at Chalk River in Ontario for a period of 120 days after the coming into force of this Act despite any conditions of its licence under the *Nuclear Safety and Control Act* relating to the installation of seismically

7. Statutes of Canada 2007, Chapter 31. The electronic version of the legislation can be found in its entirety on the Parliamentary website at: <http://www2.parl.gc.ca/HousePublications/Publication.aspx?Docid=3297776&file=4>.

qualified motor starters on the heavy water pumps and the connection to the emergency power supply.

(2) Atomic Energy of Canada Limited may resume and continue the operation of the National Research Universal Reactor at Chalk River only if it is satisfied that it is safe to do so.

2. For greater certainty, nothing in this Act derogates from the authority of the Canadian Nuclear Safety Commission in respect of Atomic Energy of Canada Limited, except for the specific licence conditions mentioned in subsection 1(1).

Ms. Keen was called as a witness during deliberations on the bill. She told Parliamentarians that, in her view, the legislation made AECL “self-regulating” without benefit of Commission oversight during the 120-day period. She called this “uncharted territory”.⁸

While it was unprecedented for Parliament to pass emergency legislation ordering the start-up of a nuclear reactor, it was certainly within Parliament’s competence to enact legislation that overrode the regulatory scheme set out in the NSCA. Ms. Keen may have overstated the case during her testimony before Parliament in asserting that AECL was at that point self-regulating without Commission oversight. This is understandable considering the extraordinary speed of events and the lack of time for anyone to study or reflect on the consequences of the legislation and the directive. The legislation did not entirely remove AECL from Commission oversight for 120 days, but authorised the reactor to be restarted despite non-compliance with one licensing condition. AECL would not be allowed to restart the reactor if it was not satisfied of its safety, and the Commission continued to exercise all of its other licensing powers. The power to regulate for safety considerations had not been transferred to the nuclear operator AECL; rather, Parliament stepped into the shoes of the Commission when it passed the emergency legislation.

Arguably, the emergency legislation implied less criticism of the Commission’s role than the directive. The directive implies that the Commission could have, but failed to consider, the need for medical isotopes in deciding whether non-compliance with a particular licensing condition required the continued shutdown of a nuclear reactor or whether some measure short of shutdown would, in the circumstances, be more reasonable to protect the health and safety of Canadians. The directive then, implicitly criticised the Commission for not taking the isotope shortage into consideration. In contrast, the legislation imposed no obligation on the Commission and cannot be read as implying that the Commission had failed to do its job properly. Rather, Parliament, in enacting emergency legislation, performed the balancing role itself. It decided to authorise the start-up of the reactor despite AECL’s non-compliance with all of the conditions of its licence because Parliament considered the medical needs of cancer patients to be of greater immediate importance. In doing so, it took the responsibility for any negative consequences of that decision on its own shoulders.

1.3 Ms. Keen’s removal as CNSC President

On 27 December 2007, the Minister of Natural Resources wrote a letter to Ms. Keen advising that he was considering recommending that her designation as President be terminated, but also maintaining her as a full-time member of the Commission. The letter stated that actions of the Commission had resulted in the shutdown of the NRU at Chalk River and that the Commission had not facilitated its return to operation in a timely manner.

8. *House of Commons Debates* (11 December 2007) at line 2005.

The Minister's letter included the rather surprising assertion that the failure of the Commission to modify its approach after the issuance of the directive had resulted in Parliament taking the extraordinary measure of adopting Bill C-38. This was a peculiar characterisation of events, considering that the tabling of the directive in the House and the introduction of legislation occurred on the same day. Since the directive applied to all future licensing decisions, the Commission had had, at the time of the passage of Bill C-38, no opportunity to comply or to refuse to comply with it.

The letter went on to express the Government's dissatisfaction with Ms. Keen in the following terms:

"These events have cast doubt on whether you possess the fundamental good judgement required by the incumbent of the office of President of the Commission, and whether you are duly executing the requirements of the office. Serious questions have arisen about whether the Commission, under your leadership, could have dealt more appropriately with the risk management of the situation".

Ms. Keen replied on 8 January 2008.⁹ Her remarks appear to be based on a belief that she could only be legally removed as President if wrong-doing or incompetence were established.

"If you believe that I have engaged in any misconduct, or that my conduct has failed to meet any performance standard, the law requires that you provide me with specific claims that you intend to rely on to justify my removal as President. In addition, the law requires that I be provided with an opportunity to provide a full response to any such claims once presented [...]"

As a fair and objective review of my performance by the government does not seem possible, I would therefore request that the government not take any steps along the lines suggested in your letter until the circumstances of this matter have been fairly and independently reviewed.

[...] I would strongly recommend that the issue of my performance as the President of the CNSC be referred to some form of public inquiry, Parliamentary committee or independent international review".

The Minister did not reply to Ms. Keen's letter. Instead on 15 January 2008, the Governor in Council, on the recommendation of the Minister, issued an Order in Council terminating the designation of Ms. Keen as President of the Commission without affecting her pay or her status as full-time permanent member. Unlike the Minister's letter, the Preamble to the Order in Council did not refer to the directive or to the emergency legislation but rather to the Chalk River emergency and a general loss of confidence in her leadership:¹⁰

"Whereas the recent extended shutdown of the Nuclear Research Universal Reactor at Chalk River, Ontario and the interruption in the world supply of medical isotopes resulted in a serious threat to the health of Canadians and others;

9. The Keen case, *op. cit.*, above note 2, at paragraph 30.

10. The Keen case, at paragraph 31.

Whereas, the President of the Canadian Nuclear Safety Commission failed to take the necessary initiative to address the crisis in a timely fashion using the means at her disposal, and failed to demonstrate the leadership expected by the Governor in Council;

Whereas the Governor in Council has carefully considered the submission received from Linda Keen, and has concluded that Linda Keen no longer enjoys the confidence of the Governor in Council as President of the Canadian Nuclear Safety Commission”.

It is likely that the breakdown in the relationship between the President of the Commission and the Government resulted from underlying problems in mutual co-operation and communication. Questions posed by Parliamentarians to Linda Keen during debate on the emergency legislation, Bill C-38, reflected a suspicion that a lack of good will or of a constructive working relationship between the Commission and AECL had in some measure contributed to the isotope crisis.¹¹ The tone and content of the letters between Linda Keen and the Minister of Natural Resources also indicate a deteriorated and worsening relationship. As in any divorce, the underlying “fault” is evident only to those directly involved, but the effects are devastating on those closest to or dependent on the key players.

1.4 The Court case

Ms. Keen launched an action for judicial review of her dismissal as President. She asked the Federal Court of Canada to declare the Order in Council invalid and unlawful, or to quash it or set it aside. By the time Ms. Keen’s case was heard in Federal Court, she had resigned as a member of the Commission.

On 7 April 2009, Mr. Justice Hughes rendered his decision. Ms. Keen was entirely unsuccessful; her dismissal as President of the CNSC was held to be valid. The Court did not accept the Federal Government’s preliminary argument that the case should be dismissed for “mootness” because Ms. Keen had already resigned from the Commission and was therefore now ineligible to be designated President. Mr. Justice Hughes found the matters at issue to be of sufficient importance to allow the case to nevertheless continue. The decision hinged on the determination that Ms. Keen’s designation as President was “at pleasure” and that her dismissal was therefore subject to much less procedural protection than would have been the case had her appointment been “during good behaviour”.

To determine the status of Ms. Keen’s designation as President, the Court examined the provisions of the NSCA establishing the Commission. The NSCA provides that ordinary members of the Commission are appointed “during good behaviour”, meaning that a Commission member may only be removed for cause following a hearing.¹² The Court found no evidence of bad behaviour on Ms. Keen’s part.¹³ This means that, had an order been issued purporting to remove Ms. Keen as a Commission member, it would have been invalid since there would have been no cause.

11. See, for example, *House of Commons Debates* (11 December 2007) at line 1950, in which Ms. Keen responded to a question from Opposition leader Michael Ignatieff about suggestions that the Commission and AECL were at “loggerheads”.

12. For example, under Section 11 of the Nuclear Safety and Control Act, a Commissioner would be required to resign if they were in a conflict of interest because of their business or work interests; if they did not resign within a set period of time that would constitute “bad behaviour”.

13. Keen case, *op. cit.*, at paragraph 57.

The designation of one of the Commission members as President is a different matter. The NSCA is silent as to whether the designation as President is on good behaviour or at pleasure. The Court held that this meant – and that Parliament intended – the designation as President to be “at pleasure”.¹⁴ Appointments at pleasure are “inherently precarious”.¹⁵ Dismissal from an “at pleasure” appointment does not imply criticism of the behaviour of the incumbent¹⁶ or require evidence of bad behaviour.

Since the designation as President was “at pleasure”, the Government was not required to accord Ms. Keen the procedural protections of a formal hearing at which evidence of wrong-doing or incompetence would be presented. Only a minimal level of procedural fairness was required. The letter sent by the Minister warning that he might consider recommending her removal as President satisfied the need for notice. Ms. Keen was given an opportunity to respond in writing and did so. It was then sufficient for the Order in Council to state, as it did, that Ms. Keen’s letter was “carefully considered”. The Court accepted that statement in the recital of the Order of the Governor in Council as fact.

The Court found that, in enacting the NSCA, Parliament had intended that the designation as President would not have the procedural protections of an appointment on “good behaviour”. It did not base its decision on any analysis of whether the President *should* benefit from those institutional safeguards. Rather, it determined that safeguards had not been drafted into the NSCA and, since they did not exist, the Court could not apply them to the facts of Ms. Keen’s dismissal.

The Court rejected all of Ms. Keen’s arguments, including one based on Canada’s international obligations under the Convention on Nuclear Safety.¹⁷ An important principle of statutory interpretation is that the legislature is presumed to respect values and principles enshrined in international treaties or agreements to which Canada has subscribed. However, the Convention, while addressing the effective separation between the regulator and promoting and utilising interests as an important value, says nothing about the security of tenure in relation to the designation of a Commission member as President. The Court found “no real help” from this point.¹⁸

The Federal Court found Ms. Keen’s dismissal lawful. Ms. Keen had been extended the minimum procedural protections accorded by the NSCA. The Government had the ability under the NSCA to terminate Ms. Keen’s designation as President just as it had. The Federal Court was obliged to apply the law that Parliament had enacted and there was no overarching principle that would allow it to decide differently.

2. What security of tenure is appropriate for the President of a nuclear regulator?

Now that the isotope shortage is less critical, and the passage of time has muted the surprise over the firing of the CNSC President, we have an opportunity to take a second look at the issues underlying events. We now have an opportunity to ask: “Is the structure of the Commission, as established by the NSCA, consistent with the concept of an *independent* regulator? Does it meet both the letter and the

14. By operation of Section 23 of the Interpretation Act, (Revised Statutes of Canada 1985, chapter I-21), if an act is silent about the status of a position, it is considered to be “at pleasure” and not on “good behaviour”.

15. As explained by the Federal Court of Appeal in *Pelletier v Canada (Attorney General)*, [2008] 3 F.C.R. 40 (FCA).

16. Keen case, *op. cit.*, at paragraph 53.

17. Keen case, *op. cit.*, at paragraph 76.

18. Keen case, *op. cit.*, at paragraph 77.

spirit of the Convention on Nuclear Safety? If the independence of the regulator should be enhanced, how could that be accomplished?”

We cannot begin to answer those questions until we better understand the law that applies to the Canadian nuclear regulator. The Commission is an administrative tribunal – a particularly powerful administrative tribunal – that exercises both a crucial public policy function and a quasi-judicial licensing function. All Canadian law applicable to administrative tribunals in general, applies equally to the nuclear regulator.

We need to know: What exactly do we mean by “independence”? Is it the same as “impartiality”? What level of independence do we expect from an administrative tribunal exercising a quasi-judicial licensing function? What level of independence do we expect for a nuclear regulator in light of international conventions on nuclear safety? What security of tenure is necessary to ensure institutional independence?

2.1 What level of “independence” and “impartiality” is required for administrative tribunals under Canadian domestic law?

“Independence” and “impartiality” are core values in any quasi-judicial licensing process. It is essential that a regulator be able to make licensing decisions based on legitimate considerations and free from undesirable influence, pressure or bias. The fundamental importance and “rightness” of the concepts of independence and impartiality seems so intuitively obvious that, at first blush, there would appear to be nothing to discuss. But “independence” and “impartiality” are value-laden concepts, and value-laden concepts always imply choice. This paper shall discuss what is meant by “independence” and “impartiality” generally for Canadian administrative tribunals and what these concepts mean in the context of quasi-judicial administrative tribunals exercising licensing functions. Later in this paper, the meaning of these words in the specialised world of the nuclear regulator operating within the safety culture and within the context of international conventions will be discussed.

“Independence” and “impartiality” are sometimes used interchangeably but are in fact distinct – though closely-related – concepts. This was elegantly explained by the Supreme Court of Canada as follows:

“Although there is obviously a close relationship between independence and impartiality, they are nevertheless separate and distinct values or requirements. Impartiality refers to a state of mind or attitude of the tribunal in relation to the issues and the parties in a particular case. The word ‘impartial’... connotes absence of bias, actual or perceived. The word ‘independent’... reflects or embodies the traditional constitutional value of judicial independence. As such, it connotes not merely a state of mind or attitude in the actual exercise of judicial functions, but a status or relationship to others, particularly to the executive branch of government, that rests on objective conditions or guarantees”.¹⁹

“Independence” relates to the *structure* of the decision-making tribunal. At Canadian law, three core characteristics define a tribunal’s institutional independence: security of tenure, financial security and administrative independence. If tribunal members are appointed “at pleasure” and subject to removal with minimal procedural protection, the tribunal is less institutionally independent from the control of the

19. Explained by Le Dain J. in *Valente v The Queen*, 1985 CanLII 25 (S.C.C.), [1985] 2 S.C.R. 673, at p. 685.

executive branch than is the case when members are appointed “during good behaviour”. As the Supreme Court of Canada has explained, “[i]ndependence premised on discretion is illusory”.²⁰

Judicial independence is critical to the public perception that a tribunal is “impartial”. It is a prerequisite to impartiality, but is not the only factor in guaranteeing impartiality. A tribunal that is structurally independent may nevertheless be subject to improper influence. Judicial independence is one important means to the ultimate goal of impartiality.²¹ Security of tenure – and institutional independence of which security of tenure is an important component – can thus be seen as a means to an end. The ultimate goal is impartial decision-making that is based on relevant considerations; especially, in the nuclear context, safety.

Bias or undue pressure can come from different sources. There might be undue influence from the executive branch if it attempts to meddle in a particular decision, from a regulatee who looks for preferential decision making or from within the decision-making body itself if one or more of the tribunal members exerts influence to benefit or disadvantage one regulatee over another. Wherever the pressure may originate, a tribunal must act impartially, or its decision making will be suspect and subject to judicial review.

2.1.1 What level of independence must an administrative tribunal have?

In Canada, provincial and federal court judges are protected by constitutional guarantees of independence. Whatever the law establishing a court of law may say, this overarching constitutional principle means that judges may only be removed for cause “related to the capacity to perform judicial functions”, and after a “judicial inquiry at which the judge affected is given a full opportunity to be heard”.²² Appointments “at pleasure” – which allow the executive to remove an appointee from office with minimal procedural protections – do not provide the security of tenure constitutionally required for provincial and federal court judges.

The Supreme Court of Canada has identified the three core characteristics of independence for provincial and federal courts of law as: security of tenure, financial security and administrative independence. Those same three core characteristics also apply to administrative tribunals, but the scope of those protections is not absolute as it is for judges, and will depend on the content of the legislation establishing those tribunals. The Supreme Court of Canada has explained:

“[For] administrative tribunals ... the test for institutional independence must be applied in light of the functions being performed by the particular tribunal at issue. The requisite level of institutional independence (i.e. security of tenure, financial security and administrative control) will depend on the nature of the tribunal, the interests at stake, and other indices of independence...”²³

Administrative tribunals created by statute and usually have some kind of relationship with the executive branch of government. Their role runs the full spectrum from advising government on policy to performing quasi-judicial licensing functions that have a direct impact on the rights and responsibilities of regulatees. At the policy-advisory end of the spectrum, very little institutional independence may be

20. Canadian Pacific Ltd v Matsqui Indian Band, 1995 CanLII 145 (S.C.C.), [1995] 1 S.C.R. 3 at 61.

21. Explained by the Supreme Court of Canada in R. v Lippé, 1990 CanLII 18 (S.C.C.), [1991] 2 S.C.R. 114, at p. 139.

22. Valente v The Queen, [1984] 2 S.C.R. 673 at 697.

23. Canadian Pacific Ltd. v Matsqui Indian Band, 1995 CanLII 145 (S.C.C.), [1995] 1 S.C.R. 3, at para. 83.

required. In contrast, when a tribunal performs functions that are more similar to those performed by a court of law, a higher degree of institutional independence will often be appropriate. The degree of independence that the tribunal possesses is determined by the provisions of the legislation that applies to it depending on the nature of the tribunal and on the work that it performs.

Ms. Keen, in her letter to the Minister of Natural Resources prior to her dismissal asked for specific claims against her of wrong-doing or failure to meet performance standards; she also recommended that her performance be referred to a public inquiry, Parliamentary committee or independent international review. The tone and content of her letter strongly suggest that she was of the view that she was protected by similar constitutional guarantees of independence that apply to provincial and federal court judges, and that her designation as President had to be considered to be “on good behaviour”.

The Federal Court disagreed and dismissed Ms. Keen’s application for judicial review, relying in part on the decision of the Supreme Court of Canada in *Ocean Port*.²⁴ In that case, the Court explained that, unlike a court of law, there is no absolute degree of independence required for an administrative tribunal. “The statute must be construed as a whole to determine the degree of independence the legislature intended”.²⁵ The Court explained that courts will generally infer that Parliament or the legislature intended a tribunal’s process to comport with the principles of natural justice, including the requirement of an independent and impartial decision maker, but, like all principles of natural justice, the degree of independence of tribunal members may be ousted by express statutory language or necessary implication. “Ultimately, it is Parliament or the legislature that determines the nature of a tribunal’s relationship to the executive. It is not open to a court to apply a common law rule in the face of clear statutory direction. Courts engaged in judicial review of administrative decisions must defer to the legislator’s intention in assessing the degree of independence required of the tribunal in question”.²⁶

The Court in *Ocean Port* explained that this reflects the “fundamental distinction” between administrative tribunals and courts. Courts are subject to the constitutional imperative of objective guarantees of individual and institutional independence. This demarcates the “fundamental division between the judiciary and the executive” and protects the actual and perceived impartiality of judges by insulating them from external influence, most notably the influence of the executive.²⁷

Administrative tribunals lack this constitutional distinction from the executive and are in fact “created precisely for the purpose of implementing government policy”. When they implement that policy, they may be required to make quasi-judicial licensing decisions that are similar to decisions that are made by the courts. But even though they make licensing decisions, they have a primary “policy-making” function and it is therefore up to Parliament to determine the tribunal’s composition and structure. Absent constitutional constraints, Parliament’s choice must be respected.²⁸

24. *Ocean Port Hotel Ltd. v British Columbia (General Manager, Liquor Control and Licensing Branch)*, 2001 SCC 52; [2001] 2 S.C.R. 20. The decision can be found electronically at <http://www.canlii.org/en/ca/scc/doc/2001/2001scc52/2001scc52.html>.

25. *Ibid* at paragraph 20.

26. *Ibid* at paragraph 22.

27. *Ibid* at paragraph 23.

28. *Ibid*, at paragraph 24.

2.1.2 What level of impartiality must an administrative tribunal have?

As important as independence is as a value, it is not an end in itself. Independence is merely one characteristic of our judicial system that seeks to achieve another purpose: impartiality.²⁹

Bias

If the level of independence enjoyed by an administrative tribunal is a variable concept depending on the nature of the tribunal and the content of the legislation that establishes it, the same cannot be said of the need for “impartiality”. Licensing decisions that affect individual rights must be free from bias, and there are public interests at stake that must be protected. The absence of actual bias cannot be on a sliding scale depending on the nature of the tribunal. In making a decision, the tribunal has either acted impartially and in accordance with principles of natural justice or it has not. If a decision is tainted by bias, common law principles of natural justice will allow that decision to be set aside, regardless of the structure of the tribunal or its level of institutional independence.

Therefore, while independence can be seen as a continuum, the same is not true of impartiality, which is not a concept that can be adjusted. A decision maker, whether a court or a quasi-judicial tribunal, cannot be permitted to be “almost” impartial. The choice is a dichotomy between bias and impartiality, with no intermediate option.³⁰ Actual bias will violate the *nemo iudex in propria sua causa debet esse* rule,³¹ which is part of the general duty to act fairly. Bias relates to the state of mind of the decision-maker in a particular case.

Reasonable apprehension of bias

While actual bias will invalidate a tribunal decision, so may a *reasonable apprehension* of bias. Certainly, if a particular decision-maker harbours pre-conceived ideas in deciding a particular matter, the requirement of impartiality will not be met. But also, if there is a reasonable apprehension of bias on an institutional level, this too can result in a finding that the decision maker is not impartial. The test for “reasonable apprehension of bias” is well established at Canadian law: Would a well-informed person, viewing the matter realistically and practically – and having thought the matter through – have a reasonable apprehension of bias *in a substantial number of cases*?³² To decide if this is the case, we must consider a variety of factors, including the purpose and structure of the legislation establishing the decision-making body.

Lack of independence can, in some cases, give rise to a reasonable apprehension of bias. Other structural issues can also give rise to a reasonable apprehension of bias, in particular, overlapping functions within the tribunal. For example, if the same official both investigates a complaint and conducts the hearing into the complaint that may result in the revocation of a licence, that may well give rise to a reasonable apprehension of systemic or institutional bias. Legislation establishing decision-making bodies in general will strive to avoid an appearance of institutional bias. The concern

29. Québec Inc. v Québec (*Régie des permis d'alcool*), [1996] 3 S.C.R. 919, paragraph 107.

30. *Ibid.*, at paragraph 110.

31. *Ibid.*, at paragraph 115.

32. As explained by de Grandpré J. in dissent in *Committee for Justice and Liberty v National Energy Board*, 1976 CanLII 2 (S.C.C.), [1978] 1 S.C.R. 369, at p. 394-95.

is that the public must have confidence in the impartiality of adjudicative agencies, especially where the decision-making body is required to have regard for the public interest.³³

At common law, it is understood that sometimes overlapping functions are required by the nature of the work that the board or tribunal performs. As has been explained by the Supreme Court of Canada:

“Some boards will have a function that is investigative, prosecutorial and adjudicative. It is only boards with these three powers that can be expected to regulate adequately complex or monopolistic industries that supply essential services”.³⁴

And in another Supreme Court case:

“The requirements of procedural fairness – which include requirements of independence and impartiality – vary for different tribunals... As Cory J. explained in *Newfoundland Telephone Co. v. Newfoundland (Board of Commissioners of Public Utilities)*, 1992 CanLII 84 (S.C.C.), [1992] 1 S.C.R. 623, at p. 636, the procedural requirements that apply to a particular tribunal will “depend upon the nature and the function of the particular tribunal” ...As this Court noted in *Ocean Port Hotel Ltd. v. British Columbia (General Manager, Liquor Control and Licensing Branch)*, 2001 SCC 52 (CanLII), [2001] 2 S.C.R. 781, 2001 SCC 52, administrative tribunals perform a variety of functions, and “may be seen as spanning the constitutional divide between the executive and judicial branches of government”. Some administrative tribunals are closer to the executive end of the spectrum: their primary purpose is to develop, or supervise the implementation of, particular government policies. Such tribunals may require little by way of procedural protections. Other tribunals, however, are closer to the judicial end of the spectrum: their primary purpose is to adjudicate disputes through some form of hearing. Tribunals at this end of the spectrum may possess court-like powers and procedures. These powers may bring with them stringent requirements of procedural fairness, including a higher requirement of independence.

...A tribunal may have a number of different functions, one of which is to conduct fair and impartial hearings in a manner similar to that of the courts, and yet another of which is to see that certain government policies are furthered. In ascertaining the content of the requirements of procedural fairness that bind a particular tribunal, consideration must be given to **all** of the functions of that tribunal. It is not adequate to characterise a tribunal as “quasi-judicial” on the basis of one of its functions, while treating another aspect of the legislative scheme creating this tribunal ... as though this second aspect of the legislative scheme were external to the true purpose of the tribunal. All aspects of the tribunal’s structure, as laid out in its enabling statute, must be examined, and an attempt must be made to determine precisely what combination of functions the legislature intended that tribunal to serve, and what procedural protections are appropriate for a body that has these particular functions”.³⁵

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33. As explained by the majority of the Supreme Court of Canada in *Committee for Justice and Liberty v National Energy Board*. The National Energy Board is a quasi-judicial tribunal that performs a licensing function – for offshore oil projects, among others – that is similar in nature to the licensing role of the CNSC in the nuclear industry.
 34. Explained by Cory J. in *Newfoundland Telephone Co. v Newfoundland (Board of Commissioners of Public Utilities)*, 1992 CanLII 84 (S.C.C.), [1992] 1 S.C.R. 623, at p. 635.
 35. *Bell Canada v Canadian Telephone Employees Association*, 2003 SCC 36 (CanLII), at paragraphs 21 and 22.

At common law, the licensing function of a body like a nuclear regulator is at the higher end of the spectrum for procedural requirements that ensure that the rights of the regulatee are adequately protected. However, the regulator also performs important public policy function for which the same level independence may not be appropriate. Courts will generally not second-guess the policy choices made by Parliament in crafting the legislation. If Parliament has chosen a lesser level of independence, or some overlapping of functions within a quasi-judicial tribunal, courts will generally defer to that choice.

As the Supreme Court of Canada has explained:

“...overlapping of different functions in a single administrative agency is not unusual, and does not on its own give rise to a reasonable apprehension of bias. As McLachlin C.J. observed in *Ocean Port, supra*, at para. 41, “[t]he overlapping of investigative, prosecutorial and adjudicative functions in a single agency is frequently necessary for (an administrative agency) to effectively perform its intended role”³⁶.

2.1.3 *Independence and impartiality for administrative tribunals at Canadian law*

The concepts of independence and impartiality for Canadian administrative tribunals can be summarised as follows:

- Security of tenure is one aspect – albeit a crucially important aspect – of institutional independence.
- Institutional independence is established by the legislation that creates a tribunal.
- Independence is a necessary – but not in and of itself sufficient – element of impartiality.
- Impartiality is the ultimate goal and relates to the state of mind of the decision-maker. In every case, decisions must be free from bias.
- A “reasonable apprehension” of bias may also invalidate a tribunal decision.
- The structure of a tribunal (e.g. overlapping functions) may give rise to a reasonable apprehension of bias.
- As with institutional independence, whether a reasonable apprehension of bias exists depends on the nature of the tribunal and on the legislation that structures the tribunal.
- Public perception is important. Decisions must be seen to be impartial to foster public confidence in the tribunal process.

36. *Bell Canada v Canadian Telephone Employees Association*, 2003 SCC 36 (CanLII), [2003] 1 S.C.R. 884.

2.2 *What does international law say about independence and impartiality for a nuclear regulator?*

Independence of the regulator is one of the fundamental principles of international nuclear law.³⁷

The independence principle is reflected in the Convention on Nuclear Safety, to which Canada has been a party since its entry into force on 24 October 1996. Articles 7 and 8 of the Convention require parties to establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations; and to establish a regulatory body entrusted with its implementation. Article 8(2) further requires each contracting party to “ensure an effective *separation* between the functions of the regulatory body and those of any other body or organisation concerned with the promotion or utilisation of nuclear energy”.³⁸ This requirement is mirrored at Article 20 of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the “Joint Convention”), to which Canada is also a party. Article 20 of the Joint Convention requires each contracting party to take appropriate steps to “ensure the effective *independence* of the regulatory functions from other functions where organisations are involved in both spent fuel and radioactive waste management”.³⁹ The precise content of the separation or independence required of nuclear regulators is not specified in either convention, both of which leave it to contracting parties to devise appropriate legislative and regulatory schemes to give effect to these principles.

The IAEA’s Handbook on Nuclear Law explains that the independence principle requires the establishment of a regulatory authority “whose decisions on safety issues are not subject to interference from entities involved in the development or promotion of nuclear energy. Given the significant risks associated with nuclear technology, other interests must defer to the regulator’s independent and expert judgement when safety is involved”.⁴⁰ Thus, in the nuclear context licensing decisions must be based on relevant considerations (safety) and not subject to political interference or undue pressure from regulatees or other stakeholders (principle of impartiality).

The Handbook acknowledges, as the conventions do, that states with different governmental organisations and legal traditions will structure their regulatory bodies in different ways. However, the Handbook provides examples of tribunal structures that may give rise to what, in the Canadian context, would be called a reasonable apprehension of bias. Of particular relevance for the purposes of this paper is the following statement:

“Perhaps the head of the regulatory body can be removed only for a cause, or can be removed at the discretion of the president, the cabinet or a minister without the showing of a cause; in the latter case, the real and perceived independence of that person will be affected. The process of designating and removing the head of a regulatory body is not determinative of the body’s independence, but it is an indication of how the safety function is viewed in the State concerned”.⁴¹

37. See Stoiber, C., Baer, A., Pelzer, N. and Tonhauser, W., Handbook on Nuclear Law, IAEA, Vienna, 2003, at page 5.

38. Emphasis added.

39. Emphasis added.

40. Stoiber, C. *et al.*, *op. cit.*, above note 37, at page 9.

41. *Ibid*, at pages 26-27.

In addition, the Handbook states that persons appointed to the nuclear regulatory body must be qualified:

“Regulatory bodies headed by persons who are perceived as lacking competence or as holding their position for purely political reasons will have difficulty in maintaining internal employee morale and external confidence”.⁴²

The Handbook identifies other factors that may enhance the independence of the regulatory body,⁴³ including:

- The separation of activities to promote nuclear development or to promote a particular nuclear technology from licensing decisions.
- The ability of the regulatory body to freely and openly provide information to Government and to the public on its safety judgments or about safety related incidents at licensed facilities.
- An appeal process for licensing decisions – either an administrative appeal or an appeal through the courts – to avoid any appearance that judgments can be reversed for extraneous reasons.
- Adequate funding and technical expertise “in house” to do its job properly, including the ability to develop its own budget and make its case to the government for the level of funding necessary to implement its responsibilities.

The level of independence enjoyed by the nuclear regulator overall will be determined by examining all of these factors together in the overall context of its legislated structure and administrative procedures.

An explanation of what the international community understands by the “independence” principle in the nuclear context can also be gleaned from another IAEA document, the IAEA Safety Standards Series – “Legal and Governmental Infrastructure for Nuclear Radiation, Radioactive Waste and Transport Safety Requirements”.⁴⁴ Unlike the conventions, the IAEA Safety Standards Series document does not set out legally binding rules but sets out standards that may be adopted at the discretion of a state, allowing for the incorporation of more detailed requirements in accordance with national practice that would have to be assessed by experts on a case by case basis.⁴⁵

Under the heading “Legislative and Governmental Responsibilities”, the IAEA Safety Standards requires a regulatory body to be established and maintained which shall be “effectively independent” of organisations or bodies charged with the promotion of nuclear technologies or responsible for facilities or activities. The reason – regulatory judgments must be made, and enforcement actions taken, “without pressure from interests that may conflict with safety”.⁴⁶ The regulatory body is to be

42. *Ibid*, at page 28.

43. *Ibid*, at pages 27 and 28.

44. No. GS-R-1, IAEA, Vienna, 2000.

45. As explained in the foreword to the Safety Series document by Director General Mohamed El Baradei.

46. *Ibid*, at paragraph 2.2(2) on page 3.

given no other responsibility that might “jeopardize, or conflict with, its responsibility for regulating safety”.⁴⁷

The IAEA document lists the considerable powers that the regulatory body should be given in order to fulfil its safety mandate, including among other things: developing safety principles and criteria; establishing regulations and guidance; requiring operators to conduct safety assessments and provide information; issuing authorisations and setting conditions; entering and inspecting facilities; enforcing regulatory requirements; and communicating directly with governmental authorities and with the public.⁴⁸

I would interpret that these international law principles in the following way: Although independence of the regulator is fundamental to international nuclear law, the precise mechanism appropriate to ensure that independence is up to individual states to determine. The regulatory scheme will have adequately protected the independence of the regulator if it can be shown that the regulator is able to make licensing or other regulatory decisions without pressure from interests that conflict with safety. If the regulator is free to exercise its expert judgment to make licensing decisions that ensure safety, then its independence has been adequately protected. This is consistent with the administrative law principle at Canadian law that, while it is up to Parliament to choose the appropriate structure for an administrative tribunal based on its nature and function, a tribunal’s quasi-judicial licensing decisions must be based on relevant considerations, free from internal bias or external pressure. Both at domestic and international law, we establish a nuclear regulator as an independent decision-making body to achieve the result we ultimately desire – fair and impartial decision-making that promotes the safety culture.

3. Is the Commission “independent” enough?

For many critics domestically and internationally, the fact that the President of the Commission was found to be appointed “at pleasure” and could be removed by the Government with only minimal procedural protections provided a definitive answer: The Commission’s independence is not adequately protected by the legislation that establishes it because the President has no real security of tenure.

Canada’s view, as expressed in its most recent national report for the Convention on Nuclear Safety, was that the legislative framework establishing the Commission was entirely in conformity with the principles of the convention. The report was published in September 2007, just four months before Ms. Keen’s dismissal as President and prior to the isotope crisis. The report referred to two key pieces of legislation that were drafted and enacted not long after the convention’s entry into force: The Nuclear Safety and Control Act sets out the mandate of the Commission, and its licensing and regulation-making powers, and was enacted in 1997; the Nuclear Fuel Waste Act was enacted in 2002. In its executive summary to the report, Canada explained that during the reporting period, Canada’s legislative obligations were fully met:

“Canada effectively maintained – and in many cases enhanced – its measures to meet its obligations under the Convention. Enabled by a modern and robust legislative framework, these measures are implemented by a regulator and nuclear power plant (NPP) licensees that focus on the health and safety of persons and the protection of the environment. Canada’s nuclear

47. *Ibid*, at page 4.

48. *Ibid*, at page 6.

technology has allowed the medical world to improve cancer therapy and diagnostic techniques (Canada supplies over 50% of the world market for medical isotopes)”.

In its report under Article 8, the Commission explained that it is a quasi-judicial administrative tribunal comprised of a maximum of seven members appointed by the Governor in Council (Cabinet) of Canada for renewable five year terms. The report explained that one of the Commission members is designated as President and Chief Executive Officer of the Commission, but did not discuss the terms of the appointments to the Commission or the designation as President. The report focused on the fulfilment of Commission obligations for public and stakeholder consultations and regulatory fairness, for adequate funding and the engagement of competent staff and for the separation of the roles of the Commission and organisations that promote and utilise nuclear energy.

In particular (at item 8.2a), the report noted:

“To safeguard the integrity of the Commission’s role as an independent decision maker, contact between the Commission and CNSC staff occurs through the Secretariat. With the exception of the Secretariat *and the President*, CNSC staff has limited interaction with the Commission outside of hearings”. (emphasis added).

This is an important point for the purposes of this paper and addresses the specific concern of internal bias or partiality. In accordance with the principles enunciated by the Supreme Court of Canada in *Régie*,⁴⁹ if there are overlapping functions within the Commission, or advice given by the same person to both Commission staff and Commission members entrusted with the responsibility of making impartial licensing decisions, this can give rise to a reasonable apprehension of bias. Although *Ocean Port*⁵⁰ tells us that Parliament may, in legislation establishing an administrative tribunal, permit overlapping functions that may be necessary to allow the administrative tribunal to fulfil its mandate, these overlapping functions and the appearance of institutional bias that they bring, may nevertheless be undesirable from a policy perspective in a tribunal with a quasi-judicial, court-like, licensing function. The CNSC report on Canada’s compliance with its obligations under the Convention on Nuclear Safety implies that, to deal with this concern, the President – but not ordinary Commission members – may have unlimited interaction with CNSC staff.

Why would significant interaction with CNSC staff be undesirable for the independence of ordinary Commission members but not for the President of the Commission? To understand, we need to examine what the Commission does as a whole, the role of members to the Commission, the role of the member designated as President and Chief Executive Officer of the Commission, and the role of the policy maker, the Government and Parliament of Canada. It is only after we come to some understanding of how the role of Commission member relates to that of President and CEO, that we will be able to reasonably assess the appropriate level of independence of the President and of ordinary Commission members.

3.1 What kind of body is the Commission?

The Commission is an administrative tribunal that is listed in Schedule 2 to the Financial Administration Act (FAA),⁵¹ with a variety of other bodies – agencies, tribunals, boards and commissions – that are not governmental departments but are “departmental corporations”. Parliament

49. Above, note 29.

50. Above, note 24.

51. Revised Statutes of Canada 1985, chapter F-11.

establishes a body like the Commission as something other than a ministerial department in large part because of the perception that it must be independent of Government in performing its quasi-judicial functions. The intent is to shield the licensing activities of the Commission from political control and the control of central agencies of Government. The Commission reports to Parliament *through* a Minister – the Minister of Natural Resources – and so has a relationship with the Minister who answers for the Commission to Parliament. However, unlike a ministerial department, the Commission does not report *to* the Minister and so functions with greater autonomy from the core public administration. For example, it has automatic authority as a departmental corporation to spend any revenues it receives in a fiscal year, whereas a true ministerial department must be specially authorised by an appropriation act.⁵²

Like other departmental corporations listed in Schedule II to the FAA, the Commission is a “body corporate” that performs “regulatory functions of a governmental nature”.⁵³ Therefore, though it enjoys a significant level of independence, it is still part of government. It is for “all its purposes an agent of Her Majesty and may exercise its powers only as an agent of Her Majesty”.⁵⁴

3.1.1 *What powers does the act give the Commission?*

The Commission is a powerful quasi-judicial administrative tribunal. Some of its powers are quite extraordinary.

For example, it has the power “in accordance with the regulations” (regulations that the Commission itself makes) to exempt “any person, class of persons, or quantity of a nuclear substance, temporarily or permanently, from the application of the act or regulations”.⁵⁵

Other powers are more expected, but nevertheless important. The Commission can control its own process by making by-laws respecting the time and place of meetings, quorum and procedures to be followed in its proceedings.⁵⁶ It has power over staffing and may appoint and employ professional, scientific and technical experts, it may establish the terms and conditions of their employment and, in consultation with Treasury Board (a central agency of Government) fix their remuneration.⁵⁷ It may also enter into contracts for services of technical experts and fix the payment for their services and expenses.⁵⁸

The Commission is a “court of record”, meaning that its decisions are recorded and have precedential value. Like a court, it has the power to summon and examine witnesses, require the production of documents and administer oaths. Its decisions and orders may be enforced in the same manner as any rule, order or decree of the Federal Court or of a provincial superior court. These significant powers do not, however, make the Commission the same as a Court. Certain procedural rules may be relaxed. Proceedings are to be as informal and expeditious as the circumstances and considerations of fairness permit. The Commission is not bound by legal rules of evidence and may

52. See section 29.1 of the Financial Administration Act.

53. Financial Administration Act, paragraph 3(1)(a.1).

54. Nuclear Safety and Control Act, Section 8.

55. Nuclear Safety and Control Act, Section 7.

56. Nuclear Safety and Control Act, Section 15.

57. Nuclear Safety and Control Act, Section 16.

58. Nuclear Safety and Control Act, Section 17.

accept information “as in its discretion it considers appropriate” and may refuse to accept evidence it “does not consider relevant or trustworthy”.⁵⁹

The Commission may issue, renew, suspend, revoke or replace a licence in accordance with regulations that it makes. The licence may not be issued unless, “in the opinion of the Commission”, the applicant is qualified to carry on the activity and will make adequate provision to protect the environment, health and safety. A licence may contain any term or condition “that the Commission considers necessary” for the purposes of the act, including a “financial guarantee in a form that is acceptable to the Commission”.⁶⁰ The Commission may also renew, suspend, amend, revoke or replace a licence “on its own motion” (meaning, without receiving an application) under “prescribed” conditions (meaning conditions set out in regulations that the Commission itself makes).⁶¹ It is an offence under the act to deal with nuclear substances in any way without a licence.⁶²

The Commission designates inspectors who are given search and seizure powers to ensure compliance with the act and regulations.⁶³ The inspector may order a licensee to take “any measure that the inspector considers necessary” to protect the environment or the health or safety of persons. The Commission reviews inspectors’ orders and confirms, amends, revokes or replaces them.⁶⁴

If the Commission believes that property is contaminated, it may file a notice in the land titles office, conduct a hearing and order the owner or occupant or any other person who has control of the affected land, to take measures the Commission prescribes to reduce the contamination.⁶⁵ In case of emergency the Commission may, without conducting any proceedings, “make any order that it considers necessary to protect the environment, health and safety”.⁶⁶

The power to licence and to take actions that are enforceable against regulatees lies with the Commission.

3.1.2 What powers does the act give the President?

The designation of a Commission member as President bestows a few very significant powers on the person chosen, most of which are distinct from those of ordinary Commission members. The President performs a publicly visible role and is, in fact, the face of the Commission. The President will represent the views and expert opinion of the Commission to Government and international bodies. When the Minister of Natural Resources asks for a report from the Commission, the President is required to provide it. In the public mind, the President is the Commission.

The designated person acts not just as President, but also as chief executive officer of the Commission. As CEO, the President supervises and directs the work of Commission members, officers and employees. In setting priorities on where Government-provided funding should be spent,

59. Nuclear Safety and Control Act, Section 20.

60. Nuclear Safety and Control Act, Section 24.

61. Nuclear Safety and Control Act, Section 25.

62. Nuclear Safety and Control Act, Section 26.

63. Nuclear Safety and Control Act, Sections 29 to 31.

64. Nuclear Safety and Control Act, Section 35.

65. Nuclear Safety and Control Act, Section 46.

66. Nuclear Safety and Control Act, Section 47.

the President thus performs an important public policy role. The separation between the Commission and the President can become blurred when the Commission delegates its powers to hire or to enter into contracts for the services of experts to the President; the President is equally empowered to delegate those powers back to the Commission, or to any of its officers or employees.⁶⁷

The President also exerts important control over the hearing and licensing process. The President decides on what work to assign to which Commission members, establishes panels of Commissioners to hear particular matters and decides which member or members are to sit on those panels.⁶⁸

Since the President is also a Commission member, the President has all of the significant powers ascribed by the act to the Commission – with one important exception. The President is forbidden by the act to vote at a meeting of the Commission or of a panel of the Commission, except in the case of a tie, in which case the President casts the deciding vote which means that in most cases, the President does not vote. The ordinary members of the Commission will often make licensing and other decisions at hearings without the vote of the President.

3.1.3 *What control does the act give the Government over the Commission?*

The act gives the Government only four significant points of control over the Commission, but in no case do any of these points of control allow the Government to interfere in or influence a particular licensing decision. The points of control are:

(1) Appointing Commissioners, designating the President, and setting their pay

The Governor in Council has the power to *appoint* up to seven permanent members to the Commission and to *designate* one of them as President. As we have seen, the act requires Commission members to be appointed “during good behaviour” to renewable five-year terms; but the designation of one of the Commission members to be President is “at pleasure”, meaning that the designation can be revoked with only minimal procedural protections, unless additional protections were to be included in the designation order itself. The member of the Commission who is designated as President must be a full-time member; otherwise, it is up to the Governor in Council to decide whether the other members should be full-time or part-time.⁶⁹ At the present time, only the President is appointed as a full-time member. The Governor in Council also fixes the remuneration of the members of the Commission.⁷⁰

(2) Regulation making

The Commission is a powerful body that both makes regulations and applies them to regulatees. The Governor in Council has a theoretical veto over the exercise of this power. Commission regulations are subject to the approval of the Governor in Council.⁷¹ As a practical matter, it is unlikely that the Governor in Council would ever withhold its approval since it is not well placed to second-guess the Commission on technical matters and, as far as can be seen this approval has never been withheld. The Governor in Council also has a broad power under Subsection 44(5) to make its own regulations

67. Nuclear Safety and Control Act, Section 12.

68. Nuclear Safety and Control Act, Section 22.

69. Nuclear Safety and Control Act, Section 10.

70. Nuclear Safety and Control Act, Section 13.

71. Nuclear Safety and Control Act, Chapeau, Subsection 44(1).

“generally as the Governor in Council considers necessary for carrying out the purposes of this Act”. This power has never been exercised and, just as for withholding approval, it is unlikely that the Governor in Council would use this power to make a regulation about technical matters within the particular sphere of expertise of the Commission.

(3) Issuing directives

The Governor in Council has the power to issue directives under Section 19 of the act. It has only exercised that power once, but that one directive continues to be the subject of editorial comment and debate. A directive is a “regulation” – delegated or subordinate legislation. Even though it is not formally called a “regulation” in the NSCA, it is a “regulation” under Canadian law because it is legislative in nature, that is, it is a rule made under authority of an act of Parliament that creates an enforceable obligation for an undetermined number of persons. A directive is binding on the Commission. The directive that was issued, requiring the Commission, when making its decisions, to take into account the health of persons dependent on medical isotopes, must be applied by the Commission in making licensing decisions affecting any regulatee. The issuance of a directive is then not an administrative action but is law-making.

(4) Reporting to Parliament

The other power exercised by the Government relates to public accountability and transparency. The Minister, under Subsection 12(4) of the act, may require the President of the Commission to report on “the general administration and management of the affairs of the Commission”. The Minister also tables the annual reports of the Commission in Parliament (Section 72).

3.2 *Were any of the actions taken by the Government at the time of the isotope crisis damaging to the independence of the Commission?*

Having described the roles and responsibilities under the act of the Commission as a whole, of the President and of the Government, we can now look at the emergency legislation, the directive and the firing of the President of the Commission. We need to ask which of those actions, if any, were damaging to the independence of the Commission or evidence of a structural weakness in the make-up of the Commission that lessens its independence. Recall that independence can be understood as a crucial means to the ultimate objective of fair and impartial decision-making by the Commission. Decisions at the policy end of the spectrum will attract a lesser requirement for independence while decisions at the quasi-judicial end of the spectrum that affect the rights and obligations of regulatees should be seen to be independent and free from internal or external pressures unrelated to safety concerns.

3.2.1 The emergency legislation

Bill C-38 has been wrongly characterised by some commentators as a dangerous precedent that *overturned* the expert opinion of the Commission concerning the safety of the Chalk River reactor and replaced it with a politically expedient decision. While the legislation without doubt was controversial and had a significant impact on the Commission and on the Crown corporation AECL, it cannot be read as overturning a Commission licensing decision. The legislation permitted AECL to start up the Chalk River reactor for a 120-day period “*despite* any conditions of its licence under the *Nuclear Safety and Control Act* relating to the installation of seismically qualified motor starters on the heavy water pumps and the connection to the emergency power supply”.

Bill C-38 did not render invalid the licence conditions imposed by the Commission in AECL's operating licence. The licence conditions still stood and the reasonableness of those licensing conditions was not challenged. AECL was permitted to restart the reactor "despite" those specific licence conditions. If AECL were in contravention of any other condition of its licence, the legislation would not have been effective to overcome any decision that the Commission chose to take to enforce that other licence condition.

The decision to introduce Bill C-38 was made by the Government, but the legislation was passed by all parties sitting in Parliament. In so doing, Parliament did not act under the Nuclear Safety and Control Act or any other piece of legislation existing on the statute book before Bill C-38. Parliament was acting in accordance with its Constitutional authority to make laws within federal jurisdiction for the benefit of Canadians. Parliament was making a policy choice and balancing the needs of cancer patients and others dependent on medical isotopes against the risk of non-compliance with a specific licence condition for a limited period of time. Parliament debated the matter and very quickly decided that the isotopes were more important. This did not imply that Parliament believed the Commission made the wrong decision in acting under its mandate to impose licence conditions to assure safety. It may have been a Hobson's choice, but it is well within the proper role of Parliament or any democratically elected government to make that kind of choice. Parliament has the right and authority to make decisions that are contrary to those of its independent regulator in acting as it thought best for the benefit of Canadians as a whole.

If the legislation were in fact proven to be flawed policy, that would be irrelevant to the right of Parliament to enact the legislation. In our democratic system, an administrative tribunal like the Commission must be subject to the will of Parliament. Parliament is supreme and can pass any legislation it considers appropriate, subject only to Constitutional considerations. Even if, on sober second thought, it were possible to prove the legislation to be objectively "bad" policy, that would not have any bearing on the right of Parliament to enact it. The remedy for a bad policy choice would be at the ballot box at the next election, not in a court of law.

We are not likely to see a repeat of Bill C-38. The speed with which consensus was reached among Parliamentarians and the extraordinarily rapid passage of the legislation through both Houses of Parliament was unprecedented in modern memory. It resulted from a perfect storm of exceptional facts and a general air of panic within the Canadian electorate that galvanized a normally fractious Parliament into concerted collective action.

3.2.2 *The directive*

The directive has also been improperly characterised by some critics as an unacceptable assault on the independence of the regulator. Such a characterisation ignores the Constitutional principle of the supremacy of Parliament. The Nuclear Safety and Control Act sets out the scope of the Commission's authority. In enacting the NSCA, Parliament included a power for the Governor in Council to issue directives of "general application on broad policy matters with respect to the objects of the Commission". The power to issue directives under the legislation allows the Governor in Council to further elaborate the scope of the Commission's authority. All tribunals must act within the scope of the powers granted to them by their constituent legislation, both the statute that establishes the tribunal and subordinate legislation. The power to issue a directive under the Nuclear Safety and Control Act is quite limited. The directive must be of "general application on broad policy matters", that is, not related to one particular regulatee or licensing issue, and it must be "with respect to the objects of the Commission", which are health, safety, the protection of the environment and national security.

The directive is a regulation, meaning that it is an enforceable law, though secondary or delegated legislation, made by the Governor in Council under the authority of the Nuclear Safety and Control Act. It is not a mere administrative action.

The directive itself is quite a soft instruction. It clarifies for the Commission that they have a power that they may not have fully appreciated prior to the issuance of the directive, and that they are obligated to turn their minds to that power. It requires the Commission to consider the health and safety of Canadians dependent on medical isotopes when it makes its licensing decisions. The directive does not require the Commission to give pre-eminence to that one consideration and leaves the Commission free to consider that the need for medical isotopes does not outweigh other safety and health considerations.

The directive can even be seen as strengthening the position of the Commission. The Commission, in future licensing decisions, is clearly authorised to perform the same balancing act that Parliament did in enacting Bill C-38. Since the issuance of the directive, it is no longer possible to argue against the relevance of a decision of the Commission based in part on the need for medical isotopes. Legislation is much less likely to be required in future if the Commission can show that it has already taken the need for isotopes into consideration in its decision. Whatever the Commission decides after taking that additional factor into consideration, the fact that the Commission has turned its mind to it and given its expert view makes it less likely that Parliament will feel the need or the competence to step in with legislation, and makes it far less likely that all parties would agree to emergency legislation.

As with Bill C-38, the issuance of a directive under authority of an act of Parliament is within the scope of the proper role of Government to enact legislation for the benefit of Canadians as a whole. The directive does not dictate in any way the decision that is to be made in any particular licensing matter, and so cannot be characterised as an improper interference in the independence of the Commission.

The fact that a directive was issued at all can, however, be seen as a rebuke to the Commission. The Government interpretation of the legislation on the role of the Commission could have been discussed collaboratively through ongoing communications between the President of the Commission and the Government of the day on policy matters. Instead, a formal directive was issued. This is a strong indication that the lines of communication between the Government of the day and the Commission through its President had broken down.

3.2.3 The firing of a President

At a minimum, the dismissal of Linda Keen as President of the Commission was a public relations disaster, domestically and internationally. This fact alone is of importance to the independence of the Commission. Public perception that the regulator is independent is crucial to public confidence in the Commission as an institution. A good reputation is like money in the bank, a crisis of confidence can lead to a run on assets and precipitate an impoverishment from which it can take a considerable period of time to recover. If reputation capital has disappeared, it can have long-term consequences for internal morale and for the public belief that Commission decisions are impartial and worthy of trust.

We know that the dismissal of the Commission President was legal at Canadian law and also not contrary to any express requirement of the Convention on Nuclear Safety or any other international law instrument. It raises questions, however, about whether Canada is in complete compliance with the spirit of the international law principle that its nuclear regulator must be independent. It is in my view an error to conflate the independence of the President of the Commission

with the independence of the regulator itself. There is no doubt that the dismissal of the President, demonstrated that the “at pleasure” appointment carried with it a low level of independence from the Government. What is rarely or never discussed in critiques of the circumstances surrounding the dismissal is the fact that the Commission is not a court of law; that the position of President differs in very significant ways from that of a judge in a court of law; and that the role of the President of the Commission is significantly different from the role of an ordinary Commissioner.

Unlike a court of law, the Commission is an administrative tribunal that both makes and applies its own rules and regulations. It makes regulations on all aspects of its mandate, including regulations respecting conditions to be imposed in licences that regulatees must abide by.

Unlike a court of law, the Commission may come to a hearing with some preconceived ideas about the subject-matter at hand. A judge in a court of law will recuse himself or herself from a matter if they have dealt with it, or with the defendant or applicant, on a previous occasion, on the basis that this previous involvement could raise a reasonable apprehension of bias. The expertise a judge applies is legal expertise, not subject-matter expertise. In contrast, Commissioners are chosen precisely for the purpose of applying their knowledge and it would be undesirable for the quality and speed of Commission decisions if they came to a hearing with a completely blank mind. Expertise is essential and will not disqualify a Commissioner from hearing a matter on the basis of reasonable apprehension of bias.

The Commissioner who is chosen to be President and Chief Executive Officer has, as President, a special role. The President will not have done his or her job well if he or she is entirely isolated from industry players, the Government of the day, international organisations, international experts and members of the Canadian public. This is not only quite unlike the role of a judge in a court of law, it is also quite unlike the role played by an ordinary Commissioner. The President will not be able to fulfil the role of intermediary between government policy makers and Commission licence granters if he or she is insulated completely from influences that, for a judge in a court of law, could give rise to a reasonable apprehension of bias. His or her unique knowledge and expertise will not fully benefit Government policy-making, if concerns about lack of independence prevent the President from sharing that expertise with Government policy makers.

The President, as Chief Executive Officer, can wield considerable power simply by choosing to give priority to staffing and policy making in one area to the exclusion of another. This can be a very subtle form of preferential treatment for or against a particular regulatee, difficult to adjudicate, define or prove in a judicial review application before a court of law.

If there were no control whatsoever over the policy direction taken by the Commission, the very real danger is that the Government of Canada would at the same time have insufficient control over the direction and implementation of nuclear policy, and the spending of public monies on nuclear power. It would be damaging to public policy making if the principle of the independence of the President of the nuclear regulator were elevated to the level of a sacred truth by which an unelected public servant would control public policy objectives and the funding for them with no possibility of government policy oversight.

However, to the extent that the President is responsible to apply objective standards to licence applications, and to thereby protect safety, security, the environment and public health, it is in Canada’s interests for the President not to be unduly pressured or influenced by Government or interested regulatees.

The Presidency of the Commission is a desirable position, carrying with it a high national and international public profile. The President is also a Commissioner who attends all hearings and presides over all Commission matters. Although it is true that the President does not ordinarily vote at meetings, under the act the President does cast the deciding vote in the event of a tie. The legislation gives him or her no vote at all unless it is crucial, that is, the President's vote is the Commission vote that counts the very most. It defies credulity to think it could not affect the President's decision making as a Commission member if there were a veiled or overt suggestion that the President might be removed for making unpopular decisions. To the extent that the threat of removal as President affects the independence of the President, not as a Government policy maker and highly visible official, but as a member of a quasi-judicial administrative tribunal with a licensing function, that threat of removal raises a reasonable apprehension of bias and results in the fear that licensing decisions might not be completely impartial.

4. What could be done to enhance the independence of the regulator?

Steps that might be taken to enhance the independence of the regulator or, more properly speaking, the public perception of the independence of the regulator include: increasing the security of tenure of the President by designating the President "during good behaviour" rather than "at pleasure" or increasing the level of independence of ordinary members of the Commission.

4.1 Should the President of the Commission be appointed "during good behaviour"?

It is open to the Government to designate a member of the Commission to be President and to hold that office "during good behaviour", i.e. the Governor in Council could make this a term of appointment in the designation order. The President could then not be removed unless "cause" were established, meaning some demonstrated failure to perform as required by the act such as conflict of interest, bias or incompetence, and if there were a hearing at which the President had been given an opportunity to respond to those allegations.

It is not customary in Canadian federal legislation for the person appointed as President or Chairperson of an administrative tribunal, even one with quasi-judicial licensing functions, to be appointed to that position "during good behaviour".

The heads of some bodies, however, particularly those with quasi-constitutional functions or responsibility to oversee government action, are given a higher level of security of tenure in their appointments. The Information Commissioner, who is appointed under the Access to Information Act to oversee the quasi-constitutional right of access of ordinary Canadians to information under Government control, is appointed to hold office during good behaviour; this is also true of the Auditor-General of Canada, who scrutinizes Government spending.

While it is not customary in Canada for the head of a licensing body to be given the highest level of security of tenure, it is customary for the ordinary members of the licensing body to be appointed to hold office "during good behaviour". If we accept that licensing decisions must be impartial and must be seen to be impartial, it is not difficult to imagine the rationale for the distinction in security of tenure as between the head of an administrative tribunal and the ordinary members of the administrative tribunal. We have seen that actual bias is to be avoided, as is the reasonable apprehension of bias that may result from the composition and structure of a tribunal. Actual bias and a reasonable apprehension of bias may invalidate decisions and call into question the legitimacy of the decision-making body itself. The security of tenure of ordinary tribunal members protects them from undue pressure in their decision-making from within the tribunal as well as from outside the tribunal.

It also protects them from the appearance of undue pressure from the head of the tribunal who performs a significant policy-making function, liaises with outside groups, government, expert bodies and industry, and for whom – by the very nature of the task the head of the tribunal is called upon to perform – it is always possible to allege a reasonable apprehension of bias.

If the President of the Commission were to be appointed during good behaviour, that might satisfy today's critics, but would not actually be beneficial to the overall independence of the Commission as a whole unless other corresponding structural changes were made. It is a little like a jar of marbles: you may not take one of them out of the middle of the jar without rearranging the rest, whether you intend to or not. It is evident that it should not be possible to fire the President or any member of the Commission for making an unpopular licensing decision. However, the President *qua* President and Chief Executive Officer, performs other significant functions that serve public policy objectives; the President is responsible for the overall administration of the Commission, including staffing; performs a highly visible and important public role as spokesperson for the Commission; oversees the allocation of scarce resources; decides how many ordinary Commissioners will preside at any particular licensing hearing; decides which Commissioners will be invited to attend any particular licensing hearing. In doing so, the President must retain the confidence of the Government, the confidence of regulatees in the impartiality of the Commission and the confidence of the ordinary members of the tribunal in his or her competence and credibility.

If the President of the Commission were appointed “during good behaviour”, then it would be necessary to relieve the President of at least part of the significant powers accorded to the President under the Nuclear Safety and Control Act. Otherwise, the President could initiate public policy and spending on nuclear matters without regard to the public policy objectives of the Government of the day, since setting different priorities would not, under the legislation as currently drafted, constitute “bad behaviour”. It might be necessary to separate the position of President from that of Chief Executive Officer, for example, to avoid the concentration of too much power in one position and the reasonable apprehension of bias that that could bring.

4.2 *Could the independence of the other members of the Commission be enhanced?*

Whether or not a decision is ever taken to increase the security of tenure of the President of the Commission, it may be possible to consider ways to enhance the independence of the other members of the Commission as a means to restore some public confidence in the impartiality of the nuclear regulator. Since Commission members already enjoy security of tenure, only a few options remain to be considered to further increase their independence.

The nuclear regulator has no Vice-Chair or second in command position expressly provided for in the legislation. The President of the Commission is the only member who must be appointed to hold office on a full-time basis. Other Commission members may be appointed to hold office on a full- or part-time basis. At this time, all Commission members other than the President are appointed on a part-time basis and are paid on a *per diem* basis when they attend hearings. The concentration of power in the office of the President is increased by the fact that the President is the only Commission member who may devote all of his/her energy and attention to the affairs of the Commission. A full-time Vice-Chair with some additional responsibilities would benefit the overall independence of the Commission as a whole.

Other measures that could be taken to shift the balance of power between the President and the ordinary members of the Commission could require legislative change, for example, it might be desirable for a person other than the President to establish panels to hear matters and to decide which Commissioners and how many Commissioners are to sit on any panel in order to avoid any criticism

that the President had somehow “stacked the deck” in order to affect the outcome in any particular matter. However, it would be unusual to strip the President of an administrative tribunal of such a role. An administrative compromise might achieve the same result. In his appearance before the Standing Committee on Natural Resources of the House of Commons⁷² five months into his mandate as President of the Commission following Ms. Keen’s dismissal, Dr. Binder indicated that as President he had invited every Commission member to attend every meeting. No allegation of “stacking the deck” for a controversial licence application could succeed if, for that meeting, every Commission member were invited to attend.

It might also be possible to amend the legislation to remove the right of the President to cast the deciding vote in a licensing matter. The same result could be obtained administratively by ensuring that, at least for important licensing decisions, an odd number of Commissioners will preside over the hearing, thus obviating the need for the President to cast the deciding vote.

The current Commission practice of separating roles by ensuring that there is limited interaction between Commission staff and Commission members is another administrative practice that lessens the possibility of systemic bias within the Commission itself.

4.3 Could anything else be done to restore confidence in the impartiality of the Commission?

Normally one expects that the passage of time, combined with irreproachable behaviour of the Commission over that period of time will dull the criticism that the Commission has faced since the dismissal of Linda Keen. There is little evidence that, two years after the event, comment is abating.

It is not possible to turn back the clock to deal with the isotope crisis differently. The Canadian Government is certainly within its rights to insist on having, as President of an important administrative tribunal entrusted with the responsibility of giving effect to Government policy, someone with whom they can communicate and who can act as an effective intermediary between them and the Commission members. If the lines of communication between the Government and the President are down and cannot be restored, the Governor in Council has the right to replace the President with someone else. But in doing so, the Government must scrupulously avoid the appearance that they are interfering in individual licensing decisions. Given the facts surrounding the isotope crisis, the Government faces an insurmountable task now if it wishes to convince anyone that it did not fire Linda Keen simply because she refused to reopen the Chalk River reactor, but rather because they had lost their confidence in her ability to effectively manage the Commission, as evidenced by the failure to avert a public crisis over the unavailability of medical isotopes for cancer patients.

The unfortunate casualty in all of this is the reputation of the Commission itself. To avoid further damage, the government must handle its administrative decisions, including those to hire and to fire heads of administrative tribunals, with greater sensitivity and respect.

72. *House of Commons Debates* (17 June 2008), at line 1145.

Nuclear Renaissance in Italy

Maintaining Momentum

by *Fabrizio Iaccarino**

Following the adoption of Law No. 99 of 23 July 2009,¹ Italy is on the threshold of returning to nuclear power, even though there are many more challenges yet to overcome. It should be recalled that Law No. 99/2009 includes enabling provisions empowering the Government to issue one or more implementing decrees providing rules for the siting of new nuclear power plants, the licensing process for the construction, operation and dismantling of those plants, as well as rules for interim storage and the final disposal of nuclear waste. On 15 February 2010, upon the proposal of the Ministry of Economic Development, the Italian Council of Ministers issued Legislative Decree No. 31/2010² (hereinafter “decree”) implementing the enabling provisions.

This paper will analyse the strengths and weaknesses of the implementing decree in order to assess if it is able to provide Italy with a sound national nuclear legislative framework which is an essential precondition to the Italian nuclear resurgence.

The decree, indeed, represents a fundamental step towards the launching of the nuclear power programme. It contains many positive aspects, e.g. the requirement to set up a Nuclear Strategy which is a policy document outlining the Government’s strategic nuclear objectives [Articles 2(1) and 3 of the decree]. This document shall include as a priority protection from ionizing radiation and nuclear safety. It will further set out, *inter alia*, the benefits in terms of security of supply, the anticipated benefits for the Italian industry, the framework for compensation of the public and the business sector, the planned contribution to the achievement of the environmental commitments undertaken by Italy at the European level, etc.

On the other hand, it will be seen that there is still a long way to go and that other implementing provisions must be issued soon in order to provide more legal certainty for investors, another essential

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1. “Legge 23 luglio 2009, n. 99 – Disposizioni per lo sviluppo e l’internazionalizzazione delle imprese, nonché in materia di energia”, Official Journal No. 176, 31 July 2009, Ord. Suppl. No. 136. Relevant articles of the law are reproduced in *Nuclear Law Bulletin* No. 84 (2009/2), pp. 149 *et seq.*
2. Decreto Legislativo 15 febbraio 2010, No. 31, published in the Official Journal on 8 March 2010, Ord. Suppl. No. 55; unofficial English translation of the decree is reproduced on page 115 of this Bulletin.

factor for the viability of the programme. Furthermore, given the central role of the Nuclear Safety Agency³ in the licensing process, its board and its operative structure should be determined as soon as possible. With respect to board members, prominent and competent individuals should be chosen in order to reassure citizens and operators of the authority of this key institution.

A. Context

Since 1987, nuclear energy has been banned from the energy mix in Italy. As a result of the decision to immediately phase-out nuclear energy, the energy system suffers from an unbalanced energy generation mix largely based on the most expensive energy sources. All of the reasons put forward to boost the so called “nuclear renaissance”, such as security of supply, energy price stabilisation and the fight against climate change, perfectly apply to the case of Italy.

Following the 1987 moratorium on nuclear power production, the nuclear legal framework has also suffered since it has not been further developed. The implementation of a nuclear power programme is thus an enormous challenge for which appropriate and timely steps need to be taken in the months and years to come. The national nuclear framework will play a crucial role because a sound basis for activities related to the peaceful uses of nuclear energy is indispensable.

The Italian Government in charge took a fundamental step towards the Italian *rinascimento nucleare* when it issued in the summer of 2009, following a Parliamentary process lasting approximately one year, Law No. 99/2009 which entered into force on 15 August 2009.

The main provision of this framework law (Article 25 – “*Delegating tasks to the Government in the nuclear field*”) is an enabling provision which lays the foundations for the new nuclear legal framework. It empowers the Government to issue one or more implementing decrees providing i) rules for siting of new nuclear power plants, of nuclear fuel fabrication plants, of spent fuel and radioactive waste temporary storage facilities and of the final repository for radioactive waste, ii) the requirements regarding the licensing process for the construction, operation and dismantling of those plants and iii) the compensation to be paid to the population living in the vicinity of the sites.

This paper is a follow-up on developments since the adoption of Law No. 99/2009 which itself was the subject of an article “Resurgence of Nuclear Energy in Italy”, published in *Nuclear Law Bulletin* No. 84.

B. The implementing decree

Legislative Decree No. 31/2010 sets out rules for the siting, construction and operation on the national territory of nuclear power plants, nuclear fuel fabrication facilities, storage systems for spent fuel and radioactive waste, as well as compensatory measures and public information campaigns.⁴

The decree implements Article 25 of Law No. 99 to the extent that it introduces a new legal framework in connection with the siting and operation of nuclear facilities in Italy. It was approved within the time limit required by the enabling law, i.e. mid-February 2010, and entered into force on

3. See Article 29 of Law No. 99/2009.

4. Unofficial English translation of the decree is reproduced on page 115 of this Bulletin.

23 March 2010. It aims at providing a wide and comprehensive set of norms in order to regulate all legal aspects of the various steps necessary to lead Italy to nuclear power production.

The decree first determines its scope and sets out the definitions (Title I). It then regulates the integrated licensing process for the siting, construction, operation and decommissioning of nuclear power plants and related compensation measures (Title II), the procedures for the siting, construction and operation of the national repository for final disposal of radioactive waste, and the technology park and related compensation measures (Title III). At the end, it includes provisions on the Government's information campaign (Title IV), and the final provisions relate to sanctions and the repeal of outdated nuclear legislation (Title V).

C. The licensing process for new nuclear power plants

The decree in its Article 4 states that the construction and operation of nuclear power plants are activities of compelling state interest. Therefore, such activities are subject to the integrated licensing process which is under the Ministry of Economic Development's general competency.

Many ministries and institutions are to be involved before a licence can be granted, i.e. the Ministry of Economic Development needs prior approval of the Unified Conference of Regions, State and Local Authorities (Unified Conference) and it will issue the licence by decree in conjunction with the Ministry of Environment, Land and Sea and the Ministry of Infrastructure and Transports.

The new licensing process for the siting, construction and operation of nuclear power plants is a process that can be divided into five steps:

- The first step is the formulation of a Nuclear Strategy by the Italian Government to be finalised three months following the entry into force of the legislative decree (Article 3).
- The second step is that the Ministry of Economic Development establishes parameters with environmental and technical criteria for the site selection, based on a proposal by the Nuclear Safety Agency which will be submitted for public consultation [Article 8(1) and (2)].
- The third step is the strategic environmental assessment ("SEA"), which will be carried out by the Ministry of Environment on both the Nuclear Strategy and the technical and environmental criteria for the suitable sites (Article 9).
- The fourth step is a site certification phase which will be conducted by the Nuclear Safety Agency on the sites proposed by operators, according to the SEA outputs. The Government will submit the sites certified under technical criteria to the agreement of the affected regions and municipalities (Articles 10 and 11).
- Finally, after the identification of suitable sites, an application for a single licence for both the construction and operation will be submitted to the Ministry of Environment. The technical assessment will be carried out by the Nuclear Safety Agency, and both the environmental impact assessment (EIA) and the integrated pollution prevention and control (IPCC) procedure will be conducted by the Ministry of Environment (Article 13).

Following this process, which will last at least thirty-six months following the entry into force of the decree, the Government will release the single licence by decree, to be published in the *Official Gazette of the Italian Republic*, see Article 13(12).

D. The Nuclear Strategy

The decree in Article 3 requires the Council of Ministers to issue the Government's Nuclear Strategy within three months from the entry into force of the decree (i.e. by the end of June). The Nuclear Strategy is a programmatic policy document which will include strategic goals in the nuclear field, among which priority will be given to nuclear safety and protection from ionizing radiation.

According to the decree, the Nuclear Strategy shall deal, *inter alia*, with safety and security of nuclear power, the effective regulatory framework to be in place in due time and the effective management and minimising of risks. It will further deal with the contribution of nuclear power to security of supply and analyse if the introduction of nuclear power into the energy mix will increase the diversity and reliability of the Italian electricity mix. In considering the percentage of the energy mix that should be covered by nuclear energy, the Nuclear Strategy should predict how energy supply and demand and the electricity generation mix will develop over the medium to long term, focusing especially on the growth in energy demand, the cost and availability of fossil fuels, and the cost and availability of emerging low-carbon technologies.

It will also assess the issue of nuclear power and carbon emissions, in particular estimating the contribution of nuclear power as a worldwide recognised low-carbon source of electricity generation to tackle climate change. The role of nuclear energy in Italy's future energy mix will be considered alongside other low-carbon sources of electricity.

The system of international alliances and co-operation and the capacity of the industry at national and international levels to meet the planned objectives will be analysed too, as it is crucial to realise new nuclear power projects in Italy. This is an essential aspect, taking into account that after 23 years of nuclear abstinence, the supply of both skilled staff and equipment will be constrained and that action is required, in particular, to retain skills and train a new workforce. This, of course, is not simply an Italian issue since similar concerns are seen worldwide across the nuclear energy industry.

Economics of nuclear power will also be examined in order to show if nuclear power is likely to be cost-competitive compared to other sources of electricity.⁵ A key aspect will also be to highlight the expected benefits for the Italian industry and the entailing socio-economic measures for the population and businesses.

Finally, decommissioning and effective long-term management of radioactive waste will be a subject of the Nuclear Strategy. Eventually, the supply of nuclear fuel will have to be addressed in order to ensure that sufficient reserves of fuel for the new nuclear power plants will be available.

The Nuclear Strategy is subject to strategic environmental assessment (SEA),⁶ see Article 9 of the decree, which will take place in addition to the online public consultation based on notice and

5. See on this subject *Projected Costs of Generating Electricity*, a joint study by the IEA and the NEA, 2010.

6. For more information on the strategic environmental assessment, see Iaccarino: "Resurgence of Nuclear Energy in Italy", *Nuclear Law Bulletin* No. 84 (2009/2), p. 73, footnote 28.

comments already provided for by the Italian Environmental Code.⁷ With the SEA a wider public consultation, probably a kind of public debate based on the French model, is expected.

E. Preliminary steps

The Government will establish by decree the requirements for nuclear operators in charge of operating a new nuclear plant (Article 5). In particular, such operators shall be equipped with all necessary technical and professional capabilities in the safety field, and they shall be able to ensure suitable human and financial resources in relation to the activities in which they are to be engaged, including the planning, construction and operation of nuclear power plants and the storage and management of radioactive waste. The operators shall further observe recommendations of the International Atomic Energy Agency (IAEA).

Operators that meet these requirements will submit to the Minister for Economic Development their plan of work for the development of nuclear power plants, Article 6.

According to Article 7 of the decree, the Nuclear Safety Agency (hereinafter “Agency”), following the operator’s application, will carry out a technical check of the compliance of the nuclear plants’ requirements with (i) optimum international safety standards set by the IAEA and (ii) the guidelines and best practices recommended by the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA). Approvals of requirements and technical specifications applicable to nuclear power plants which have already been granted within the previous ten years by the competent authorities of member countries of the OECD/NEA, or by the competent authorities of states with which bilateral agreements for technological and industrial co-operation in the nuclear sector have been signed, are accepted as valid in Italy subject to the approval of the Agency. The final aim of this assessment is to release a preliminary safety report based on the findings in connection with the integrated licensing process. The findings have to be conveyed to the operator within 90 days of the application.

F. Site selection

Site selection for new nuclear power plants will indeed be a very critical step in terms of both technical assessments and public acceptance. The decree provides, in Article 8, a list of criteria for technical assessment for the site selection. Herein, particular consideration will be given to the following aspects:

- population and socio-economic factors;
- hydrology and water resources;
- meteorological factors;
- biodiversity;
- geophysics and geology;
- natural beauty;
- architectural and historical merit;
- accessibility;
- seismic and tectonic characteristics;
- distance from inhabited areas and from transport infrastructure.

7. “Decreto Legislativo 3 aprile 2006, n°152 – Norme in materia ambientale”, *Official Journal* No. 88, 14 April 2006.

Based on a proposal prepared by the Agency, the Ministry of Economic Development, in conjunction with other ministries concerned, will establish the set of parameters embodying the technical criteria mentioned above. When preparing its proposal, the Agency will request input by various public research bodies, including ISPRA (the Institute for Environmental Protection and Research), ENEA (the National Agency for new Technologies, Energy and Sustainable Economic Development) and universities.

This approach to define and approve such parameters is encouraged in order to provide for maximum transparency and participation. Further, the draft parameters have to be published on the websites of several ministries and on the Agency's website. All interested individuals and entities, including regions and municipalities, will be able to take part in the proceeding and send their comments and technical proposals, to be published on the websites as well. The final scheme of parameters will then be submitted to SEA, together with the Nuclear Strategy, see Article 9 of the decree.

Following the establishment of the final criteria, the operator submits to the Government and the Agency an application for the certification of one or more sites for use as the location for a nuclear power plant.⁸ The Agency will carry out the technical assessment and, provided that the outcome of the assessment process is successful, the Agency will issue the certification for each site proposed within a time limit of 120 days. The certification may be subject to specific conditions and it must comply with i) the environmental and technical requirements and related reference parameters, ii) the technical choices in relation to the interaction between site and plant and iii) the Nuclear Strategy. Therefore, at the end of this phase, operators will obtain certification of the site which fulfils the above mentioned criteria.

At the same time, the Agency transmits the certification to the Government which, for its part, submits the certified sites for the agreement of the regions in whose territory one or more sites is located. The region has 60 days to make comments. In case of a negative outcome, the file will be examined by an Inter-institutional Committee formed by representatives of ministries, the region and the municipality involved. In case of disagreement, the final decision will be deliberated in the Council of Ministers which transmits the list of certified sites to the Unified Conference. If the Unified Conference does not deliver a decision within two months, the final decision will be taken by deliberation of the Council of Ministers following which the Government will adopt the decree of approval of the list of certified sites.

This decree enables operators to carry out preliminary activities on the certified site, that is i) land surveying, ii) geological and geophysical surveying, iii) specific environmental investigations, iv) construction of service connections to the site and v) enclosure of the perimeter, see Article 12 of the decree. In the event that part of the area is not available to the operator, compulsory purchase of the land shall be carried out.

For each certified site the operator concerned must, within twenty-four months of the issue of the decree submit the application for a licence for construction and operation of the nuclear power plant, see Article 11(11) of the decree. The expiry of such a time limit makes ineffective the certification of each site, and the operator will lose the right to carry out the mentioned preliminary activities. In this event, the operator will be responsible for the costs incurred in certifying the site. The

8. The application must contain, *inter alia*: i) identity of the applicant, ii) precise description of the planned site, iii) initial plan of the plant, iv) documentation concerning the technical surveys carried out on the site; v) documentation concerning the environmental impact assessment.

period of twenty-four months may be extended just once and for a period not exceeding twelve months.

G. Single licence

At this stage, the licensing process starts. The decree provides that the operator holding the rights to the certified site submits to the Ministry of Economic Development the application for a licence for the construction and operation of the nuclear power plant, Article 13 of the decree.⁹ The application must be submitted at the same time to the Ministry of the Environment, Land and Sea, in particular for the purposes of initiating the environmental impact assessment (EIA) process, and also to the Ministry of Infrastructure and Transport.

The Agency carries out the technical assessment on behalf of the Ministry of Economic Development, including relevant authorities identified on the basis of the particular plan under assessment, for the opinions and permits falling within their competence. In parallel, the Ministry of Environment, Land and Sea proceeds with the environmental impact assessments.

The Agency reports its binding opinion within twelve months of the application and the associated documentation being received by the Ministry of Economic Development. The latter convenes a so-called services conference, involving the Agency, the ministries concerned, the region and local authorities affected and other involved parties and administrations. Article 13(11) of the decree provides for a procedure in the event of failure to reach an agreement during the services conference. In essence, further to consultation with local authorities, if necessary, the Council of Ministers shall replace by decree the agreement with the local authorities involved. Once the services conference is concluded positively, the Ministry of Economic Development in conjunction with the two ministries mentioned above, shall issue the single licence by decree. The licence is published in the *Official Gazette of the Italian Republic* and on the websites of the Agency and the ministries concerned.

The single licence covers both the construction and the operation of the plant in accordance with the approved design.¹⁰ According to the decree, it constitutes “a declaration of public utility, a statement that the works are urgent and cannot be postponed and, where appropriate, a declaration of non-transferability and the posting of the compulsory purchase order for the assets contained therein”, Article 13(15). It further replaces any administrative measures, authorisations, concessions, licences, permits, deeds of consent and administrative deeds.

Under the licence’s regime, the licensee will be responsible for:

- the plant’s safety;
- the training of staff with particular regard to the prevention of risks associated with the process of constructing and operating the plant;
- compliance with the Agency’s requirements in relation to safety and, in particular, to the construction and operation of the plants;

9. The decree, in Article 13(2), includes a detailed list of data and information which the applicant must submit with his application, otherwise it will be rejected.

10. Based on the U.S. model, see Burns, Stephen, “Looking Backward, Moving Forward: Licensing New Reactors in the United States”, *Nuclear Law Bulletin* No. 81 (2008/1), pp. 7 *et seq.*

- providing wide-ranging and detailed information to the general public involved, in appropriate formats, with the aim of creating suitable conditions for the implementation and management of the nuclear power plant to which the licence pertains.

Administrative and criminal sanctions are provided for in Articles 33 and 34 of the decree in case the licensee fails to comply with the provisions of the decree.

H. Socio-economic benefits

The resurgence of nuclear power will have many positive socio-economic impacts, two of which are highlighted below.

First, according to Article 23 of the decree, residents and businesses operating in the vicinity of the nuclear power plant, as well as the local authorities affected, will be afforded economic benefits. The decree provides for compensative measures that shall be paid by the licence holder and companies involved in the construction of the nuclear power plant. This can be considered as an opportunity for operators to find consensus for the nuclear new build with the local population. The compensation measures are different for the construction and the operation phase.

- During the construction phase, for each calendar year or part thereof, the amount to be paid is EUR 3 000 per MW up to 1 600 MW, with a 20% premium for any installed power in excess of this level in favour of:
 - i) 40% to local authorities (10% to province; 55% to municipality where the plant is located; 35% to neighbouring municipalities, in the range of 20 km from the plant's perimeter);
 - ii) 60% to people and companies in the area surrounding the site by reducing their energy charges and local taxes.
- During the operation phase, the contribution will be EUR 0.4 per MWh of electricity produced and transmitted for the whole operating life of the plant. Such benefit shall be paid to local authorities where the plant is located and used to reduce power supply charge of end users.

On top of that, the plant will be charged with a local tax of around EUR 10 million each year. It seems clear that these financial benefits have been provided so that the nuclear power plant is perceived as a source of benefits by the local population.

The second positive socio-economic impact will be the result of Italy's industrial involvement in nuclear power production which will entail the creation of employment and economic advantages for the whole country. This infrastructural programme represents, indeed, one of the largest investments ever made in Italy. For instance, taking as a reference technology the construction of AREVA's European Pressurized Reactor (EPR), a single unit requires an investment between EUR 4 and 4.5 billion, depending on the site's characteristics. This means that, considering just the Enel/EDF's

programme of installing at least four EPR units, an overall investment between EUR 16 and 18 billion could be realised in the years to come.¹¹

Moreover, the construction of units will require a highly specialised workforce, bearing in mind that the construction phase of one EPR unit, at the peak level, requires almost 2 500 persons per day and that the operation of one EPR plant, which is projected to operate for 60 years, requires up to 300 highly specialised experts and other workers.

I. Waste management and decommissioning

The decree dedicates a title to “procedures for the siting, construction and operation of the national waste repository for the permanent disposal of radioactive waste, the technology park and the associated compensatory measures”.

Article 26 of the decree appoints Sogin – the state owned company already in charge of waste management and the decommissioning of “old” nuclear power plants – as the company responsible for the decommissioning of the new plants at the end of their life cycle and for the safe storage of waste and spent fuel. In addition, Sogin has the duty to construct and operate the national repository and a related technology park.

The technology park will be equipped with shared facilities for the services and functions necessary in order to manage an integrated system of operational work, scientific research and technology development. It has the technological infrastructure for carrying out the work associated with the management of radioactive waste and spent fuel, Article 25(2).

In particular, Sogin shall manage the activities for the siting of the technology park, it is responsible for the work related to the authorisation process for both the construction and operation of the technology park as well as the treatment and disposal of radioactive waste, it will collect the payments for treating and disposing of the radioactive waste from operators, it will operate the facilities in the park and promote information campaigns for the public on the activities performed.

Sogin shall realise the technology park and the national repository together with the supporting structures with the funds deriving from its activities related to the “old” nuclear power plants’ decommissioning (i.e. by a contribution on electricity bills). However, it is provided that further and different sources of funding may be established by the Government and public authorities involved to create the study and experimentation centre. On the other hand, regarding the new nuclear power plants, charges for the delivery of radioactive waste and spent nuclear fuel to the national disposal will be fixed annually by the Independent Authority for Energy and Gas, based on the cost estimated by Sogin.

Sogin, for its part, is required to pay compensation measures to the area where the technology park is located. The measures will be proportional to the radioactive waste placed in the repository.

11. Forty-five Italian supply companies are already involved in the Flamanville 3 project (EPR technology – Enel’s participation in the project amounts to 12.5%), especially involved in the production of nuclear forgings, mechanic equipments and bulk materials. Moreover, almost twenty Italian enterprises are involved in the construction of the EPR nuclear power plant in Olkiluoto, Finland.

J. Licensing process for the final waste repository

The licensing procedure for the siting, construction and operation of the national waste repository is similar to the one established for new nuclear power plants.

The first step of the licensing process is a proposal by Sogin, within six months of the entering into force of the decree, of a national map indicating the potentially suitable areas for the siting of the technology park, together with a draft outline plan for the development of the technology park. The proposed national map, together with documentation specified in the decree [Article 27(2)], is to be published in a timely fashion on the website of Sogin for comments by regions, local authorities and qualified stakeholders. Then, Sogin will organise a national symposium in which several public authorities at the national, regional and local levels as well as other unions and associations will participate in order to discuss the national map.

Following this symposium, Sogin shall prepare an updated version of the national map of suitable areas, taking into account the results of the public consultation, and transmit it to the Ministry of Economic Development which, with the prior approval of the Agency, shall finally approve it by issuing, in conjunction with the Ministry of Environment, Land and Sea and the Ministry of Infrastructure and Transport, a ministerial decree.

Thereafter, regions and local authorities from the areas which are potentially suitable for hosting the technology park will be invited to express their interest. Sogin will instigate bilateral negotiations for the purpose of agreeing on a site; however if no region makes known its interest an Inter-institutional Committee will be established which will aim at finding a solution with respect to both finding a site and an agreement. If it fails to do so, the Minister for Economic Development, in conjunction with other ministries concerned, will take the decision on the site by decree, Article 27(11), and the President of the Council of Ministers will adopt a decree which will replace the agreement, Article 27(15).

It is provided that Sogin will arrange for an information campaign in the region including the site for the technology park in order to provide information on the national repository with particular focus on safety issues.

No later than four months from the publication of the decree indicating the location for the site of the technology park, Sogin shall transmit to the Minister for Economic Development a request for the integrated licence to construct and operate the national repository and any other facility within the technology park. The procedure is similar to that required to operate the nuclear power plant and therefore it includes (i) the assessment by and a favourable opinion from the Agency; (ii) an environmental impact assessment and (iii) a services conference.

The Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, will issue the integrated licence within thirty days of the assessment process, Article 27(16).

K. Decommissioning fund

The decree in Article 21 requires the creation of a decommissioning fund which will ensure the presence of the necessary funds for the decommissioning of the plant at the end of its lifetime. In particular, it sets out the legal and regulatory framework for funding future expenses associated with waste disposal and the decommissioning of nuclear facilities. It establishes the financial

responsibilities of operators and provides that the fund be managed in a transparent way and be used only for the said purpose.

The safe decommissioning of nuclear installations, including the long-term management of radioactive waste and spent nuclear fuel, calls for substantial financial resources. A lack of such resources at the time they are needed may adversely affect the decommissioning process. Sufficient financial resources at the appropriate time should be available to allow complete decommissioning of nuclear installations in conformity with safety standards. Unlike most other industrial sectors, the nuclear industry has to include the end of the operating lifetime of a nuclear installation into their planning and consideration. For countries that start up this business, such as Italy, it is an essential tool to guarantee the seriousness and the solidity of the programme.

The decommissioning fund is established as an external fund, managed by a dedicated body which is independent from the contributors to the fund. The organisation in charge is the so called State Equalisation Fund for the Electricity Industry which is a public body. The fund is fed by the single licence holder's annual contribution for each operating year of the facility, in compliance with the polluter-pays principle and with Article 22 of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The Joint Convention indeed calls on each contracting party to take the appropriate steps to ensure that "adequate financial resources are available to support the safety of facilities for spent fuel and radioactive waste management during their operating lifetime and for decommissioning".¹² If, at the end of the plant's life-cycle, the decommissioning fund is not adequate the operator has to adjust it.

The amount of the contribution is determined by the Italian Electricity and Gas Authority (AEEG) on the basis of a recommendation from Sogin, the public entity in charge of decommissioning activities, and following the advice of the Agency.

The decree clarifies that the State Equalisation Fund manages the fund and may make interest-bearing investments with a risk profile no more adverse than that of Government bonds, provided that the necessary liquidity of the fund is not jeopardised. This provision is compliant with the principle to manage the funds in a responsible manner, any possible misuse has to be avoided and the investments should be long-term with a secure risk profile while, at the same time, providing adequate protection of the real value of the funds.¹³

L. Information campaign and transparency initiatives

Rather modern features have been included in the decree with a view to boosting the nuclear programme one of which is the national information campaign (Article 31). It is of particular

12. The creation of a decommissioning fund is also a requirement under Article 41 of the Euratom Treaty, which requires investment projects relating to nuclear energy to be communicated to the Commission for examination. Council Regulation (Euratom) No. 2587/1999 of 2 December 1999 defining the investment projects to be communicated to the Commission in accordance with Article 41 of the Treaty establishing the European Atomic Energy Community includes decommissioning activities as investment projects to be communicated to and discussed with the Commission. Consequently, persons and undertakings should inform the Commission of decommissioning funding arrangements in respect of new build nuclear installations.

13. In this regard see Commission Recommendation of 24 October 2006 on the management of financial resources for the decommissioning of nuclear installations, spent fuel and radioactive waste (2006/851/Euratom).

importance in the case of Italy which has not developed nuclear activities and scientific information on nuclear matters for more than twenty years.

The enabling law [Article 25(2)(q) of Act No. 99/2009]¹⁴ requires the Government to carry out a national information campaign on nuclear matters and to implement appropriate information procedures for the population involved in the construction of new nuclear power plants. It also states in Article 25(2)(o) of the law that appropriate and broad forms of information should be given to the general public, especially to people living in areas where nuclear power plants will be built, in order to ensure suitable conditions during the construction and operation of such plants.

The decree enables the Government to put forward a programme for establishing and implementing a “national information campaign on energy production from nuclear sources”. The programme sets out the objective, the budgetary requirements, the usable resources, the information content, the target audience and the parties involved in implementing the information campaign.

The decree also states that the planning and implementation of the campaign will be assigned to a specialist with particular competency in this field. The communication campaign will start within six months from the entry into force of the decree.

Another interesting provision in terms of communication and information is Article 22 of the decree which establishes a Public Assessment and Transparency Committee in every region where a certified site will be located, to which the holder of the site licence must provide data and information regarding the nuclear power plant. Many authorities and institutions will be represented in this committee, such as ministries, regions, local authorities, the environmental agencies ISPRA and ARPA (Regional Environmental Protection Agency), the Nuclear Safety Agency, the holder of the site licence, trade unions, environmental and entrepreneurial associations and a qualified expert on radioprotection (appointed by the Agency). Its remit is to ensure public information, monitoring and public assessment of the activities concerning the authorisation process, the construction, operation and decommissioning of the nuclear power plant involved and the measures adopted to protect the health of workers and the local population and to safeguard the environment.

The aim of these transparency committees – the idea of which is clearly taken from the French *Commissions locales d’information*¹⁵ – is to designate one institution with the specific task of public information on the respective activities, an interdisciplinary body which represents both competency and openness.

Any person interested in obtaining information about the plans and activities of the nuclear power plant and the measures adopted in terms of nuclear safety, radiation protection and the prevention or reduction of risks and exposures may contact the Transparency Committee which is required to provide the information in its possession or which has been acquired from the licence holder for the purpose, Article 22(3) of the decree.

14. Unofficial English translation in *Nuclear Law Bulletin* No. 84 (2009/2), pp. 149 *et seq.*

15. “Décret no. 2008-251 du 12 mars 2008 relatif aux commissions locales d’information auprès des installations nucléaires de base”.

M. What is still missing

There are two provisions – related to the competence of the Interdepartmental Committee for Economic Planning (CIPE) which is a governmental structure under the Prime Minister – whose issuing was foreseen by the enabling law (Act No. 99/2009) for the beginning of 2010 and which remain to be implemented. More specifically, neither the decision defining what kind of nuclear power plants can be constructed and operated nor the criteria and measures to be adopted in order to promote the creation of consortia for the construction and operation of nuclear power plants, formed by electrical energy producers and industries,¹⁶ have been issued yet.

Both are very important for the completion of the new legal and regulatory framework.

More urgent, however, is the appointment of the board members of the new Nuclear Safety Agency – the body exclusively focused on nuclear matters which will be in charge of ensuring nuclear safety and security – as well as the issuing of its statute. The decree assigns to the Agency a key role both *de jure* through the definition of the numerous implementing provisions and the technical assessment and *de facto* by the creation of confidence, especially in civil society, that a competent body ensures nuclear safety, security and the safe management of radioactive waste.

Finally, another crucial provision is missing which has been delegated by the decree to a ministerial decree to be issued by the Ministry of Economic Development and the Ministry of Economy and Finance, i.e. the identification of tools for financial coverage against the risk of delays during the construction of nuclear power plants for reasons beyond the licensee's control. The decree in Article 17 provides that insurance cover is to be established to guard against the risk of such delays.

The aim is to mitigate the financial risks of such a capital intensive investment and, of course, this issue is particularly important in a country like Italy which re-embarks on a nuclear power programme. In this situation, the effectiveness and efficiency of a new legal and regulatory system has to be tested in the field. A new licensing system with the involvement of several ministries, together with a new regulatory body in charge of regulatory matters, could be a source of delays during the construction of new nuclear power plants. On the one hand, this kind of risk could be managed through international co-operation and the exchange of experiences.¹⁷ On the other hand, concrete guarantees should be provided to potential investors. However, ensuring a sound and efficient regulatory regime will reduce the financial risks associated with nuclear projects, in particular, caused by potential delays in the regulatory process which could give rise to uncertainties with regard to the construction period and the risk of cost overruns.

N. Initiatives aimed at improving capacity building

Following a gap of more than twenty years, the construction and operation of nuclear power plants in Italy will also require technology transfer and capacity building. In this regard, substantial support has

16. According to the text of the law, it can be envisaged that these consortia should be formed by electrical energy producers and industries, according to the model known as “Finnish” or “Mankala”, i.e. the creation of a consortium whose shareholders are energy companies and energy intensive end-users.

17. See Part N which follows and Article 7 of the decree, providing that the approvals formerly granted in the last 10 years by national competent authorities of OECD/NEA member countries or of countries with whom there are bilateral agreements on nuclear matters can be taken as reference for the assessment aimed at releasing the preliminary safety report of the plant.

been provided by the OECD/NEA whose expertise in all fields related to nuclear energy and worldwide vision of the nuclear community is of outstanding importance for Italy to embark successfully upon a nuclear power programme.

In the same direction, an important step was made on 9 April 2010, with the Fifth French-Italian Dialogue Forum, chaired by Italian Prime Minister Silvio Berlusconi and French President Nicolas Sarkozy.¹⁸ During this meeting, a series of memoranda of understanding and agreement were signed, with the aim of boosting nuclear co-operation between the two countries. Agreements were signed in the field of research, co-operation in science and technology and on nuclear safety and radiation protection, information in the event of a radiological emergency, radioactive waste management and decommissioning and finally in the field of co-operation between the industries. In particular, the several agreements signed on that occasion constitute a concrete step towards maximising the involvement of the Italian industry in the construction of nuclear power plants in Italy.

Conclusions

The publication of the new nuclear energy act, which sets out an appropriate legal framework dealing with all aspects of the peaceful uses of nuclear energy, is of crucial importance for the nuclear rebirth in Italy. Its scope ranges from the establishment of a new licensing procedure for new build – the first example in Europe of a combined construction and operation licence – to a new set of norms defining responsibilities in the field of radioactive waste management and decommissioning and the licensing procedure for the final repository of nuclear waste.

The decree is certainly a milestone for the Italian nuclear programme. However, there is still a long way to go. For the success of the programme, it will be essential to build consensus between national, regional and local institutions, operators and the industry. The complex processes and the involvement of many governmental, administrative, regional and local levels of public bodies show the importance of closely co-ordinating and co-operating so as to meet the goals within the given timeframes. Further, the success of the programme depends on the trust and confidence in the technical competencies of the public and private institutions in order ensure nuclear safety. The law thus builds on transparency, openness, the dissemination of scientific information which should enable the public to form their opinions on nuclear matters based on correct information and data. In this regard, the engagement of civil society in the policy and decision-making process is fundamental in order to create trust and gain wide public support.

18. These agreements were signed in the framework of the programme of technical co-operation and assistance in the nuclear field with France signed on 24 February 2009.

The Temelín-Judgement of the European Court of Justice

by Wolf-Georg Schärf*

On 27 October 2009, the European Court of Justice¹ (ECJ) rendered its milestone decision in the so called ČEZ case which deals with the operation of the Temelín nuclear power plant in the Czech Republic.² The nuclear power plant in Temelín has strongly strained the relationship between Austria and the Czech Republic throughout its history, involving not only local communities but also high level politicians, members of parliament and European Union institutions. For the outside world it is difficult to understand that antinuclear politics is part of the Austrian identity. Against the background of this tense relationship, the case was brought before the ECJ, whose judgement shall be analysed in this paper.³

The case was brought to halt the nuclear power plant in Temelín in the Czech Republic from operating by means of national Austrian private law. The *Land Oberösterreich*, a province of Upper Austria, is owner of land situated about 60 km from the Temelín nuclear power plant. It sued the operator, the Czech energy company ČEZ, before the *Landesgericht Linz*, a provincial court in Austria, which referred questions to the ECJ.⁴ The Advocate General Maduro published his opinion on 22 April 2009⁵ which turned out to be quite different from the legal opinion of the court. His arguments were based on the articles concerning the common market principles of the Treaty establishing the European Community (EC Treaty) which were ignored by the ECJ. The ECJ rather based its judgement on the Treaty establishing the European Atomic Energy Community (Euratom Treaty).

The consequences are far reaching because the ECJ strengthens the position of the European Atomic Energy Community (EAEC) in the field of nuclear safety.

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1. Since the entry into force of the Lisbon Treaty renamed to “Court of Justice of the European Union”.
2. Case C-115/08, *Land Oberösterreich v ČEZ*, OJ C 312 of 19 December 2009, page 5; available at www.curia.europa.eu (in the following referred to as “the judgement”).
3. Analysed before in: Schärf, Wolf-Georg, “Anmerkung zum Urteil des EuGH vom 27.10.2009, Rs. C-115/08 (Unterlassungsklage gegen Betrieb eines Kernkraftwerks eines anderen Mitgliedstaats)”, *EuZW* 2010, 33; Schärf, Wolf-Georg, *Österreichisches Recht versus Euratom* (3. Teil), *RdU* 2010.
4. See summary of the judgment in *Nuclear Law Bulletin* No. 84 (2009/2), pages 118 *et seq.*
5. Commented by Reich, Norbert, “Kernkraft ante portas der Gemeinschaftsfreiheiten”, *EuZW* 2009, 433.

The facts of the judgment are the following:⁶

“The Land Oberösterreich is the owner of land used for agriculture and agricultural trials, on which there is an agricultural college. The land is situated about 60 km from the Temelín nuclear power plant, which itself is situated in the Czech Republic, 50 km from the Austrian border. That power plant is operated by the Czech energy-supply undertaking, ČEZ, a limited company incorporated under Czech law in which the Czech State holds a majority share. The construction and operation of the Temelín nuclear power plant were authorised by the Czech authorities in 1985 and it began operating on a trial basis on 9 October 2000. In 2001, the Land Oberösterreich and other private owners brought actions before the Landesgericht Linz pursuant to Paragraph 364(2) of the ABGB,⁷ seeking an order that ČEZ put an end to the actual or potential nuisance relating to the ionizing radiation potentially emanating from that power plant. According to the Land Oberösterreich, the radioactivity generated by the normal functioning of that nuclear power plant or, in any event, the risk of contamination caused by the operation and potential malfunction of the plant cause a lasting interference with the normal use of its land. The requirements for bringing an action, possibly preventive, for cessation of a nuisance are therefore satisfied.

The Temelín facility was, moreover, the subject of negotiations between the Republic of Austria and the Czech Republic. A protocol resulting from those negotiations was signed in Melk (Austria) on 12 December 2000. On 29 November 2001, those two States adopted a document known as ‘The Conclusions of the Melk Process and Follow-Up’, referred to *inter alia* in the joint declaration of the Czech Republic and the Republic of Austria concerning their bilateral agreement relating to the Temelín nuclear power plant, annexed to the final act of the Treaty concerning the accession of 10 new Member States, including the Czech Republic, signed in Athens on 16 April 2003,⁸ in which both States declared that they would fulfil the series of bilateral obligations set out in those conclusions.

Since 2003, the Temelín nuclear power plant has operated at full capacity.

According to the Communication of 6 November 2002 from the Commission to the Council and the European Parliament: Nuclear safety in the European Union,⁹ in the negotiations leading up to the accession of 10 new Member States in 2004, particular attention was directed to the questions of nuclear safety at the power plants in the candidate States, following the adoption of the resolutions of the Cologne Council of 3 and 4 June 1999, the Commission having been requested to ensure the application of high safety standards in Central and Eastern Europe. The evaluation carried out led to the decommissioning of some nuclear reactors and to recommendations for improvements to other reactors in order to bring them up to a level of safety comparable to that prevailing in the European Union for comparable reactors, the implementation of which has been monitored by the Commission and the Council.

6. Paras. 38-49 of the judgement.

7. Austrian Civil Code (Allgemeines Bürgerliches Gesetzbuch).

8. OJ 2003 L 236, p. 17.

9. COM(2002) 605 final.

In parallel with the Melk process, in which the Commission played an active role in facilitating the dialogue between the Czech and Austrian authorities, the safety of the Temelín nuclear power plant was evaluated by the Commission and the Council, as were the other nuclear installations in the candidate countries, and the results of that evaluation showed that the Temelín nuclear power plant, subject to the implementation of the proposed recommendations, showed a satisfactory level of nuclear safety.

Moreover, [...] since the accession of the Czech Republic to the European Union, checks have been carried out at Temelín in 2004 and in 2005, pursuant to Article 35 EA.

The Commission also issued an opinion on 24 November 2005 concerning the plan for the disposal of radioactive waste resulting from modifications at the site of the Temelín nuclear power plant, in the Czech Republic, in accordance with Article 37 of the Euratom Treaty.¹⁰ In that opinion, the Commission concluded inter alia that the implementation of the plan for the disposal of radioactive waste in whatever form resulting from modifications at the site of the Temelín Nuclear Power Plant ..., both in normal operation and in the event of an accident of the type and magnitude considered in the General Data, is not liable to result in radioactive contamination, significant from the point of view of health, of the water, soil or airspace of another Member State.

On 3 November 2006, the two reactors of the Temelín power plant were inspected and found to be compliant with the prevailing legislation; a definitive declaration was issued to that effect”.

I. The questions referred by the *Landesgericht Linz*

Two provisions of Austrian legislation are essential to understand the questions of the national court: First, according to Section 364(2) of the Austrian Civil Code (ABGB) “[t]he owner of land may prohibit his neighbour from producing effects, emanating from the latter’s land, by effluent, smoke, gases, heat, odours, noise, vibration and the like, in so far as they exceed normal local levels and significantly interfere with the usual use of the land. Direct transmission, without a specific legal right, is unlawful in all circumstances”. Secondly, Section 364a of the ABGB provides: “However, if the interference is caused, in excess of that level, by a mining installation or an *officially authorised*¹¹ installation on the neighbouring land, the landowner is entitled only to bring court proceedings for compensation for the damage caused, even where the damage is caused by circumstances which were not taken into account in the official authorisation process”.

The *Landesgericht Linz* states that Section 364a of the ABGB, which precludes bringing actions for cessation of a nuisance emanating from installations which have been granted official authorisation, was also applicable in respect of installations authorised by foreign authorities where it appeared that the conditions of authorisation applicable in the state of origin were, in essence, equivalent to those prevailing in Austria. However, a higher Austrian court, the *Oberster Gerichtshof* held that only authorisations granted by the Austrian authorities come within the scope of application of Paragraph 364a. It took the view that the relevant article was based exclusively on consideration of diverging national interests and there was no reason why Austrian law should restrict the property rights of Austrian landowners purely in the interests of protecting a foreign economy and public

10. OJ 2005 C 293, p. 40.

11. Emphasis added.

interests in another country. According to the *Landesgericht Linz*, that interpretation of the *Oberster Gerichtshof* could be contrary to Community law in that it discriminates between installations which have been granted official authorisation by the Austrian authorities and those which have been granted authorisation by the authorities of another member state. In light of these diverging views of national courts, the *Landesgericht Linz* decided to stay the proceedings and refer to the ECJ questions related to infringements of Articles 10, 12, 28 or 43 of the EC Treaty.¹²

II. The judgement

1. Scope of the judgement

From the procedural point of view, the ECJ first clarifies that under Articles 234 of the EC Treaty¹³ and 150 of the Euratom Treaty, it has identical jurisdiction for the purpose of interpreting the relevant provisions of both the EC and the Euratom Treaty. Thus, the fact that the national court referred questions to the ECJ concerning the interpretation of provisions of the EC Treaty does not prevent the ECJ from providing to the national court all the elements which may be of assistance in adjudicating the case pending before it, whether or not that court has referred to them in its questions.

It is for the ECJ to extract from all the information provided by the national court, in particular from the grounds of the decision referring the questions, the points of Community law which require interpretation, having regard to the subject-matter of the dispute.¹⁴

2. Principle of prohibition of discrimination

The ECJ continues to address the principle of prohibition of discrimination on grounds of nationality within the scope of application of the Euratom Treaty which constitutes an important part of the case. It clarifies that Article 12 of the EC Treaty¹⁵ prohibits any discrimination on grounds of nationality within the scope of application of the EC Treaty. Although the Euratom Treaty does not contain an explicit provision which corresponds to that article, the ECJ refers to its settled case law that the principle laid down in Article 12 of the EC Treaty forms part of the “principles” of the Community and that the rule on equal treatment of nationals is one of the fundamental legal provisions of the Community.¹⁶ Moreover, Article 12 of the EC Treaty is a specific expression of the general principle of equality which itself is one of the fundamental principles of Community law.¹⁷ It is also settled case law that the rules regarding equality of treatment between nationals and non-nationals forbid both overt discrimination by reason of nationality or, in the case of a company its seat, and all covert forms of discrimination.¹⁸

12. See paras. 50-54 of the judgement.

13. Article 267 of the Treaty on the Functioning of the European Union (“TFEU”).

14. Para. 81 of the judgement; see, *inter alia*, C-35/85 Procureur de la République v Tissier [1986] ECR 1207, para 9.

15. Article 18 TFEU.

16. Para 87-89 of the judgement; see, *inter alia*, Case 2/74 Reyners v Belgium [1974] ECR 631, para. 15 and 24; see also Schärf, Wolf-Georg, *Europäisches Nuklearrecht* (2008), 172.

17. See, to that effect, *inter alia*, C-810/79 *Überschär v Bundesversicherungsanstalt* [1980] ECR 2747, para. 16, and Case C-224/00 *Commission v Italy* [2002] ECR I 2965, para. 14.

18. Para. 92 of the judgement; see, *inter alia*, Case C-330/91 *Commerzbank* [1993] ECR I-4017, para. 14, and *Commission v Italy*, para 15.

According to the ECJ, the difference in treatment introduced by Section 364(2) and Section 364a of the ABGB, works to the detriment of installations which have received official authorisation in a member state other than Austria and in reality leads to the same outcome as a difference in treatment on grounds of nationality. Following the establishment of difference in treatment on grounds of nationality the ECJ analyses whether in the present case the discrimination falls within the scope of application of the Euratom Treaty.

Here, the court once again elaborates on the competencies of the Community in the nuclear energy field. It states that, although the Euratom Treaty does not contain a title relating to nuclear installations, the fact remains that Title II of that treaty, entitled “Provisions for the encouragement of progress in the field of nuclear energy”, includes a Chapter 3, entitled “Health and Safety” which is intended to provide for the protection of public health in the nuclear sector.¹⁹

The ECJ has held on a number of occasions, most clearly in the case *Commission v Council C-29/99* of 2002, that the provisions of said Chapter 3 are to be interpreted broadly in order to give them practical effect.²⁰ In that landmark decision of 2002, the ECJ added that it is inappropriate, in order to define the Community’s competences, to draw an artificial distinction between the protection of the health of the general public and the safety of sources of ionizing radiation. As a result, it inferred, *inter alia*, that the Community also has a certain amount of external competence in the areas covered by Articles 7, 14 and 16 to 19 of the Convention on Nuclear Safety which cover respectively the authorisation system applicable to the construction and operation of nuclear power plants, assessment and verification of safety, emergency preparedness, siting, design, construction and operation of power plants.²¹ In particular, it held with respect to Article 7 of the Convention on Nuclear Safety that, even though the Euratom Treaty does not grant the Community competence to authorise the construction or operation of nuclear installations, under Articles 30 to 32 of the Euratom Treaty, the Community possesses legislative competence to establish, for the purpose of health protection, an authorisation system which must be applied by the member states. Such a legislative act constitutes a measure supplementing the basic standards referred to in Article 30 of the Euratom Treaty.²²

The court clearly qualifies the dispute at issue in the main proceedings – which aims at determining whether ionizing radiation emanating from the Temelín nuclear power plant justify ČEZ being ordered to adapt or even close it – as a matter falling within the scope of the Euratom Treaty. Hence, it follows that the difference in treatment does come within the scope of application of the Euratom Treaty.²³

19. Para. 99 of the judgement; see, *inter alia*, Case C-62/88 *Greece v Council* [1990] ECR I 1527, para. 17; Schärf, Wolf-Georg, *Europäisches Nuklearrecht* (2008), 247.

20. Para. 100 of the judgement; see, *inter alia*, Case C-29/99 *Commission v Council* [2002] ECR I-11221, para. 78; Schärf, Wolf-Georg, *Europäisches Nuklearrecht* (2008), 247.

21. Para. 102 of the judgement.

22. Para. 103 of the judgement; *Commission v Council*, para. 88 and 89; Schärf, Wolf-Georg, *Europäisches Nuklearrecht*, 2008, 250.

23. Paras. 106 and 107 of the judgement.

3. *Justification of the discrimination*

The court finally determines if the discrimination on grounds of nationality under the Euratom Treaty may not be justified by objective considerations unrelated to nationality and, if so, whether such a difference in treatment is proportionate to the legitimately pursued objective.²⁴

At the outset, the court clarifies that aims of a purely economic nature cannot justify discrimination on grounds of nationality within the scope of application of the Euratom Treaty,²⁵ just as they cannot justify a barrier to the fundamental principles of free movement of goods or the freedom to provide services.²⁶

With respect to the protection of life or health and the protection of the environment or property rights, the ECJ equally rejects to qualify them as potential justifications for a difference in treatment on grounds of nationality. It first notes that, according to the preamble to the Euratom Treaty, the signatories thereto were “[a]nxious to establish conditions of safety which will eliminate danger to the life and health of the people”. Article 2(b) of the Euratom Treaty, for its part, states that, in order to perform its task, the Community must, as provided for in that treaty, “establish uniform safety standards to protect the health of workers and of the general public and ensure that they are applied”.²⁷ These aspects are elaborated on in Articles 30 to 39 of the Euratom Treaty, which make up Chapter 3 of Title II of the Euratom Treaty. They are intended to ensure the consistent and effective protection of the health of the general public against the dangers arising from ionizing radiations, whatever their source and whatever the categories of persons exposed to such radiations.²⁸ Articles 30 and 31 of the Euratom Treaty provide, in particular, for the Community, following the opinion of a scientific group of experts, to adopt basic standards.²⁹

The ECJ continues to refer to the competencies of the Community according to Articles 30 *et seq.* of the Euratom Treaty and concludes that the provisions of Title II, Chapter 3 of the Euratom Treaty form a coherent framework conferring on the Commission powers of considerable scope in order to protect the population and the environment against the risks of nuclear contamination.³⁰

The court observes, in particular, that compliance of Temelín with basic standards for health protection for the general public against the dangers arising from ionizing radiation was approved at Community level following the accession of the Czech Republic to the European Union. Moreover, the questions relating to safety at that power plant were evaluated by the Commission and were the subject matter of recommendations and monitoring by the Commission, with a view to bringing it up to a level of nuclear safety comparable to that prevailing in the European Union.³¹

24. Para. 108 of the judgement.

25. Para. 109 of the judgement.

26. See, *inter alia*, Case C-120/95 Decker v Caisse de Maladie des Employés Privés [1998] ECR I 1831, para. 39, and Case C-158/96 Kohl v Union des Caisses de Maladie [1998] ECR I 1931, para. 41.

27. Para. 111 of the judgement.

28. Para. 112 of the judgement; Case C-70/88 Parliament v Council [1991] ECR I 4529, para. 13 and 14.

29. Para. 113 of the judgement.

30. Para. 118 of the judgement; see Land de Sarre and Others v Ministre de l’Industrie [1988] ECR 5013, para. 11, and Commission v Council C-29/99, para. 79.

31. Paras. 125 and 130 of the judgement.

The court further states that, in the event of a malfunctioning of the protection system introduced under the Euratom Treaty, the member states have a number of remedies at their disposal for obtaining the corrections necessary in the circumstances (see Articles 32, 142, 145-149 of the Euratom Treaty). It judges that, under those circumstances, Austria cannot justify the discrimination practised in respect of the official authorisation granted in the Czech Republic for the operation of the Temelín nuclear power plant on the ground that it is necessary for protecting life, public health, the environment or property rights.³²

The existing Community framework, of which that authorisation forms a part, contributes precisely and essentially towards ensuring the protection of those values.³³

III. The Community Framework

The *ČEZ* case once again provided the ECJ with the opportunity to dwell on EAEC competencies *vis-à-vis* its member states. It reinforces the Euratom Treaty in many ways: first, the court ignores the pleadings based on the EC Treaty and examines the case under the Euratom Treaty since it deals with the authorisations concerning the construction and operation of a nuclear power plant (*lex specialis principle*). Secondly, the court maintains the reasons given in its judgement C-29/99 of 2002 and thereby establishes what can be called settled case law with respect to Community competencies under the Euratom Treaty. Thirdly, the decision strengthens to a certain extent the protection of those member states who allow for the construction and operation of nuclear power plants, especially those with activities carried out at border regions. Once nuclear related activities meet the requirements of national laws under the Euratom Treaty and pass the Community's scrutiny, they are no longer subject to discriminatory acts in other member states. Finally, the decision might discourage the population and non-governmental organisations (NGOs) in neighbouring countries from taking judicial action against long odds. They would have to consider national laws in light of the Euratom Treaty and respect the protection provided by Community laws and acts.

The framework governing nuclear activities under the Euratom Treaty was once again highlighted by the ECJ. It states that the existing Community framework, of which the authorisation (thus every other authorisation relating to nuclear installations within the EU) forms a part, contributes precisely and essentially towards ensuring the protection of values, such as life, public health, the environment or property rights. This strong statement gives an opportunity to briefly recall the current framework with respect to nuclear safety:

Chapter 3 of Title II (Articles 3-39) of the Euratom Treaty, as presented by the ECJ, forms the basis of this framework.

The Community enacted Directive 96/29/Euratom.³⁴ It is the basic legal framework of the EAEC in the field of radiation protection; other directives are Directive 2003/122/Euratom³⁵ on the

32. Paras. 131-134 of the judgement.

33. Para. 136 of the judgement.

34. Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation OJ L 159, 29 June 1996, p. 1-114.

35. Council Directive 2003/122/Euratom of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources OJ L 346, 31 December 2003, p. 57-64.

control of high-activity sealed radioactive sources and orphan sources and Directive 2009/71/EURATOM³⁶ on the safety of nuclear installations.

Emergency preparedness is also governed by Community legislation. After the Chernobyl accident Directive 89/618/Euratom on radiological emergency measures was enacted.³⁷ The ECJ argued that incidents and accidents outside the territory of a member state are also covered by the directive.³⁸

Both the European Atomic Energy Community (EAEC) and its member states are parties to the Convention on Nuclear Safety (CNS).³⁹ The accession of the EAEC to the CNS, adopted on 17 June 1994, was approved by the Commission.⁴⁰ The mentioned articles (7, 14, 15, 16, 17, 18 and 19) imply specific Community competencies in the field of legislative and regulatory framework, assessment and verification of safety, radiation protection, emergency preparedness, siting, design and construction and operation of nuclear installations.

Articles 17 to 19 of the CNS include siting, design, construction and operation of nuclear power plants. The ECJ did not elaborate on the decommissioning of a nuclear installation, but it can be argued that powers to enact legislation on the construction of a nuclear installation implicate the obligation to also enact rules on the decommissioning.

The CNS standards are internationally recognised for nuclear power plants and other nuclear installations⁴¹ and the very fact that Euratom acceded to this convention led to a considerable “clarification” of its competencies. The so called Nuclear Safety Directive (2009/71/Euratom) can be considered as a consequence of this clarification, and it remains to be seen which other fields the European Commission will occupy in the future.

A field not mentioned in the ruling, however, of great importance in the case at issue is related to questions of nuclear third party liability in case of transboundary damages. The case illustrates the lack of harmonisation in this field. The Czech Republic is party to both the Vienna Convention on Civil Liability for Nuclear Damage and the Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention. Austria is not party to any international nuclear third party liability convention.⁴² It has instead established special nuclear liability rules in its national legislation

36. Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations L 172/20 EN Official Journal of the European Union 2 July 2009.

37. Council Directive 89/618/Euratom of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency OJ L 357, 7 December 1989, p. 31-34.

38. Case C-177/03 Commission v France [2004] ECR I-11671 para. 32; Schärf, Wolf-Georg, *Europäisches Nuklearrecht*, 375.

39. INFCIRC/449; see also Schärf, Wolf-Georg, *Europäisches Nuklearrecht*, 2008, 91; Primosch, “Das IAEO-Übereinkommen über nukleare Sicherheit”, *ÖJZ* 1997, 219 *et seq.*; Kamminga, “The IAEA Convention on Nuclear Safety”, *The International and Comparative Law Quarterly* 1995, 872 *et seq.*; Reyners, Patrick, “The Convention on Nuclear Safety of 1994”, *Review of European Community & International Environmental Law* 1996, 231 *et seq.*

40. Decision 1999/819/Euratom of 16 November 1999 (OJ 1999 L 318, p. 20), amended by Decision 2004/491/Euratom of 29 April 2004 (OJ 2004 L 172).

41. Stoiber, C., Baer, A., Pelzer, N., Tonhauser, W., *Handbook on Nuclear Law*, IAEA 2003, page 66.

42. Austria signed the 1960 Paris Convention on Nuclear Third Party Liability, the 1964 Additional Protocol and the 1982 Protocol but has not ratified any of these instruments.

that are not compatible with the principles underlying the international conventions.⁴³ Recently this subject, which can be seen as a separate set of regulations in the field of nuclear energy law, became an often discussed topic on the EU agenda. Jakub Handrlica wrote an article on this subject, presenting the various regimes applicable in the 27 EU member states;⁴⁴ and the European Commission published an Impact Assessment Study, prepared by the Spanish law firm *Gomez-Acebo & Pombo*.⁴⁵ A draft directive has not been tabled yet; however, third party liability seems to be one of the next fields which the Commission might occupy in the near future in order to tackle the *patchwork situation*⁴⁶ in which old member states are mostly party to the 1960 Paris Convention on Nuclear Third Party Liability⁴⁷ and new member states are mostly party to the 1963 Vienna Convention on Civil Liability for Nuclear Damage.

IV. Licence to operate a nuclear installation

The origin of the present decision was a civil procedure brought before the *Landesgericht Linz*, related to a licence for a nuclear power plant granted by authorities of another member state of the EAEC. The ECJ cannot verify the legality of a national licensing act since it has no jurisdiction over national laws; the interpretation of national laws falls within the exclusive jurisdiction of the national courts which have to apply those in accordance with primary and secondary Community legislation. The following principles with respect to the licensing of nuclear installations and the Community's impacts are recalled:

It is the member states which are competent to grant a licence for the construction and operation of nuclear installations. The member states have to examine the application of the potential operator and its ability to fulfil the legal and technical requirements. When granting the licence, the national authority will take into consideration both national nuclear laws and regulations and national laws in related subject matters, if applicable, such as building laws and other technical regulations. It is important to note that national laws, according to Directive 96/61/EC⁴⁸ on public participation and access to justice, have to be observed.

The rights of other parties to participate in the decision-making process are a matter of national regulatory frameworks. Neighbours and persons who are affected by such a project have the right to participate and to be heard before rendering the final decision. The role of NGOs might further evolve

43. 1999 Federal Act on Civil Liability for Damage Caused by Radioactivity, available in English at <http://www.nea.fr/law/legislation/austria/AUSTRIA-AtomicLiabilityAct.pdf>.

44. Handrlica, Jakub, "Harmonisation of Nuclear Liability in the European Union: Challenges, Options and Limits", *Nuclear Law Bulletin* No. 84 (2009/2), pages 35-64.

45. Final Report TREN/CC/01-2005 Legal Study for the Accession of Euratom to the Paris Convention on Third Party Liability in the Field of Nuclear Energy (http://ec.europa.eu/energy/nuclear/studies/doc/2009_12_accession_euratom.pdf).

46. Handrlica, Jakub, *op. cit.*, page 36.

47. Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964, by the Protocol of 16 November 1982 and by the Protocol of 2004.

48. Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC.

in the years to come since in Community legislation, there is the trend that NGOs will play a bigger role in the licensing procedure.⁴⁹

With respect to the Temelín case, it should be recalled that the nuclear installation was actually the subject of negotiations between the Republic of Austria and the Czech Republic; a Protocol resulting from those negotiations was signed on 12 December 2000 and on 29 November 2001. The two states adopted “Conclusions of the Melk Process and Follow-Up” in which the “signatories agree that the process started in Melk has led to an improvement in the exchange of information on the Temelín Nuclear Power Plant thus creating prerequisites for more confidence between the Czech Republic and Austria within an intensive dialogue on nuclear energy”. Austria undertook to not block the Czech Republic’s accession to the European Union, and the Czech Republic agreed to assess the environmental impact of Temelín as to enhance safety and security.

The EU and its member states signed in 1998 the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, known as the Aarhus Convention. This Convention gives further rights to citizens in environmental matters. The Aarhus Convention was transposed into Community law through Directives 2003/4/EC⁵⁰ relating to access to information and 2003/35/EC⁵¹ relating to public participation. According to Article 6 of Directive 2003/4/EC, the public has the right of access to justice. It is important to quote Articles 1a and 15⁵² of Directive 2003/35/EC which grant individuals the right to appeal and to seek a decision by a court. It should also be mentioned that the EU and all its member states – except for Malta – are contracting parties to the Espoo Convention, which sets out the obligations of parties to assess the environmental impact of certain activities (including nuclear energy projects) at an early stage of planning. It lays down the general obligation of states to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

A minimum level of harmonisation is now guaranteed by the Nuclear Safety Directive 2009/71/Euratom⁵³ which, in its Articles 4 and 5, includes important provisions with respect to the legislative, regulatory and organisational framework as well as the competent regulatory authority.

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49. Case T-585/93 *Greenpeace and others v Commission* [1995] ECR II-2205; upheld on appeal Case C-321/95 *Greenpeace and others v Commission* [1998] ECR I-1651. In this case the Court of First Instance argued about the position of NGOs and their legitimation.
 50. Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC Official Journal L 041, 14/02/2003 P. 0026 – 0032.
 51. Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC; OJ 2003 L 156, p. 17.
 52. See also Schärf, *Grundrechte in der EU*, *ecolex* 2004, 669; Manhardt/Maurer, *EU-Verfassungsvertrag und Grundrechtscharta*, *MRM* 2005, 163.
 53. Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations L 172/20 EN Official Journal of the European Union 2 July 2009, also reproduced in *Nuclear Law Bulletin* No. 84 (2009/2), pp. 141 *et seq.*

V. Competence of the Community

In its judgement at hand, the ECJ marked some cornerstones in the area of nuclear safety. It is clear that the European Commission does not have the right to licence a nuclear installation. Instead the Commission does have the obligation to request preliminary information according to Article 33(2) of the Euratom Treaty and ongoing information according to Article 38 of the Euratom Treaty. In the case of Article 38(2) of the Euratom Treaty, the Commission has the right, in case of urgency, to issue a directive in order to ensure observance with basic standards.

The rights of the Commission are rights of information, rights to issue a report and also the right to take measures. All of them were illustrated by the ECJ in its judgement in a structured fashion along the Articles 30-39 of the Euratom Treaty. These formal rights are combined with the substantive ones described above which, since the judgment of 2002 C-29/99, have been interpreted by the ECJ broadly in order to give them practical effect.⁵⁴

Since its inception, the Euratom Treaty has given the European Commission wide ranging powers. Due to the relatively minor role of the nuclear field compared to others sectors in the last thirty years, the Commission lacked political will to strive for additional powers. The Commission's increased interest and activities in this field have, so far, been backed by the ECJ which might open doors for closer co-operation between the EC and the member states in the field of nuclear safety.

VI. The right to appeal – changes due to the Lisbon Treaty

The framework governing nuclear activities under the Euratom Treaty constitutes a minimum level of harmonisation which protects life, public health and the environment. Compliance with those rules at the Community level prevents discriminatory measures in other member states of the EAEC. This framework can, however, only be complete if there is also a right to appeal against Community acts. Increased competencies at the Community level should lead to increased possibilities of independent judicial checks and the possibility to appeal.

Before the entry into force of the Lisbon Treaty, the right to appeal against decisions of the Commission as well of the Council was a more or less limited one. The origins were laid down in the *Plaumann* judgement.⁵⁵ From 1962 on, the ECJ as well the Court of First Instance⁵⁶ have judged it in an often critical fashion, namely the applicant must be the addressee of the decision in question or the applicant has to claim that the regulation or decision addressed to another person is of direct and individual concern to him.

Article 263 of the TFEU⁵⁷ does not, on the face of it, allow any challenge by non-privileged applicants with respect to directives. It has nonetheless been held that the mere fact that the measure is a directive will not, in itself, render the action inadmissible since Community institutions cannot, by their choice of legal instrument, deprive the applicant of judicial protection. An applicant will, however, have an uphill struggle to convince the Community courts that he is individually

54. See Case C 29/99 *Commission v Council* [2002] ECR I-11221.

55. Case 25/62 *Plaumann & CO v Commission* [1963] ECR 211.

56. Now called General Court, see Article 254 of the TFEU.

57. Previously Article 230 EC Treaty.

concerned.⁵⁸ The general principle is that a measure will be of direct concern where it directly affects the legal situation of the applicant and leaves no discretion to the addressees of the measure, who are entrusted with its implementation⁵⁹ which must be automatic and result from Community rules without the application of intermediate rules.⁶⁰ Due to the *Plaumann* decision, the proof of individual concern of the applicant is the most difficult challenge in a case.⁶¹ Persons other than those to whom a decision is addressed may only claim to be individually concerned if that decision affects them by reason of certain attributes which are peculiar to them or by reason of circumstances in which they are differentiated from all other persons and by virtue of these factors distinguishes them individually just as in the case of the person addressed.⁶²

The application of the *Plaumann* test is, in practical terms, unrealistic because only a small number of applicants can prove their individual concern. The *Plaumann* test has effectively prevented virtually all direct actions brought by private parties to challenge decisions addressed to others,⁶³ except where the challenged decision had a retrospective impact.⁶⁴

A major case was that of *Greenpeace*⁶⁵ in which the applicants – 16 individuals – rely either on their objective status as “local resident”, “fishermen” or “farmer” or on their position as persons concerned by the consequences which the building of the two power stations might have on local tourism, on the health of Canary Island residents and on the environment.⁶⁶ They do not therefore rely on any attribute substantially distinct from those of all other people who live or pursue an activity in the areas concerned; thus, for them the contested decision, in so far as it grants financial assistance for the construction of the two power stations, is a measure whose effects are likely to impinge on objectively, generally and in the abstract, various categories of person and in fact any person residing or staying temporarily in the areas concerned.⁶⁷ It has consistently been held that an association

58. Craig/De Búrca, *op. cit.*, 509; Case 298/89, *Gibraltar v Council* [1993] ECR I-3605; Case T-135/96 *UEAPME v Council* [1998] ECR II-2235 para. 63; Case T-94/04 *EBB v Commission* [2005] ECR II-4919.

59. Craig/De Búrca, *ibid*, 509.

60. Craig/De Búrca, *op.cit.*, 509; Case C-356/96 *Société Louis Dreyfus et Cie v Commission* [1998] ECR I-2309; Case T-54/96 *Oleifici Italiana SPA and Fratelli Rubino Industrie Oleari SPA v Commission* [1998] ECR II-3377; Case C-486/01 P. *Front National v European Parliament* [2004] ECR I- 6289 para 34.

61. Case 25/62 *Plaumann & CO v Commission* [1963] ECR 211.

62. Case 25/62 *Plaumann & CO v Commission* [1963] ECR 211.

63. Craig/De Burca, *op. cit.*, 513; Case 1/64 *Glucoseries Réunion* [1964] ECR 413; Case 38/64 *Getreide Import Gesellschaft/Commission* [1965] ECR 203; Case 11/82 A.E. *Piraiiki-Patraiki* [1985] ECR 207; Case 97/85 *Union Deutsche Lebensmittel Werke GmbH v Commission* [1987] ECR 2265; Case 34/88 *Lefebvre Frère et Sœur SA v Commission* [1989] ECR 275; Case T-86/96 *Arbeitsgemeinschaft Deutsche Luftfahrtunternehmen and HAPAG Lloyd Fluggesellschaft mbH v Commission* [1999] ECR II-179.

64. Craig/De Burca, *op. cit.*, 513; Cases 106 and 107/63 *Alfred Toepfer and Getreide Import Gesellschaft v Commission* [1965] ECR 405; Case 62/70 *Bock v Commission* [1971] ECR 897; Case 11/82 A.E. *Piraiiki-Patraiki* [1985] ECR 207.

65. Case T-585/93 *Greenpeace Council v Commission* [1995] ECR II-2205; upheld on appeal Case C-321/95 *Greenpeace Council v Commission* [1998] ECR I-1651; See also Case T-114/97 *Associazione Agricoltori della Provincia di Rovigo v Commission* [1995] ECR II-455; Case T-192/95 R. *Danielsson v Commission* [1995] ECR II-3051.

66. Case T-585/93 *Greenpeace Council v Commission* [1995] ECR II-2205 para 54.

67. Case T-585/93 *Greenpeace Council v Commission* [1995] ECR II-2205 para 54.

formed for the protection of the collective interests of a category of persons cannot be considered to be directly and individually concerned by a measure affecting the general interests of that category, and is therefore not entitled to bring an action for annulment where its members may not do so individually. Furthermore, special circumstances such as the role played by an association which led to the adoption of an act within the meaning of Article 173 of the EC Treaty⁶⁸ may justify holding admissible an action brought by an association whose members are not directly individually concerned by the contested measure.⁶⁹ The three applicant associations claim that they represent the general interest, in the matter of environmental protection, of people residing on Gran Canaria and Tenerife and that their members are affected by the contested decision; they do not, however, adduce any special circumstances to demonstrate the individual interest of their members as opposed to any other person residing in those areas. The possible effect on the legal position of the members of the applicant associations cannot, therefore, be any different from that alleged by the applicants who are private individuals and cannot be considered to be individually concerned.⁷⁰

In the case *Unión de Pequeños Agricultores*, the ECJ declared that the rules of Community law do not allow any wider interpretation since no change has been made in the wording of the treaties.⁷¹ In the legal literature the *Plaumann* test is widely discussed and most of the authors agree that the accepted line of decisions of the ECJ and the Court of First Instance do not violate the human rights of the Human Rights Convention as well the Charter of Rights.⁷² With the Treaty of Lisbon the Charter of Fundamental Rights will also be primary law.

VII. Conclusion

The ČEZ judgment dated 27 October 2009 is another milestone in the further development of European legislation in the nuclear field. The ECJ correctly based its decision on the Euratom Treaty and the reasons of the ruling will assist Austrian courts and others in adjudicating such cases, even if it did not answer all questions of the pending case. It will entail consequences for the relationship between the European Atomic Energy Community and its member states, and further strengthen the European Commission's role and competencies. Further, it assigns Community acts a major role in cross-border conflicts. It will be more difficult for member states to dispute the Commission's competencies, and *vice versa*, it remains to be seen if and to which extent the Commission will make use of its rights and obligations.

With the changes following the entry into force of the Treaty of Lisbon the equilibrium of powers will further shift from the national states towards the Community, not only towards the Commission, but also towards the European Parliament. Even though the Treaty of Lisbon has not changed the Euratom Treaty much, most institutional changes will also apply within its scope. Individual rights to appeal and to defend their interests are better protected. The industry, NGOs, member states as well as the people of Europe will arbitrate to defend their interests on both the national and the European level.

68. Now Article 263 TFEU.

69. Case T-585/93 *Greenpeace Council v Commission* [1995] ECR II-2205 para. 59.

70. Case T-585/93 *Greenpeace Council v Commission* [1995] ECR II-2205 para. 60.

71. Case 500/00 P *Unión de Pequeños Agricultores/Council* [2002] ECR I-6077.

72. Craig/De Burca, *op. cit.*, 525.

Case Law

Belgium

Constitutional Court ruling on nuclear taxes (2010)

On 30 March 2010, the Belgian Constitutional Court¹ ruled that nuclear taxes imposed by Belgium on operators in 2008 are lawful.

The “Programme Act” of 22 December 2008 amends the Act of 11 April 2003 on financial reserves for the dismantling of nuclear power plants and on the management of nuclear fuel irradiated in those plants. It imposes taxes on the nuclear operators and shareholders of Belgian nuclear power plants [i.e. Electrabel (GDF Suez), Synatom, EDF Belgium and S.P.E.]. The total amount of the tax is to be shared among them, according to their respective share of nuclear energy production.

Electrabel (GDF Suez), Synatom, EDF Belgium and S.P.E each filed an annulment appeal to the Constitutional Court against the Programme Act. The nuclear operators argued that there was an unreasonable difference in treatment between them and the producers of non-nuclear generated electricity and other players on the Belgian electricity market, such as electricity importers, transporters, distributors and suppliers.

The Constitutional Court did not accept any of the arguments in support of alleged infringements and so endorsed the Programme Act. The decision of the Constitutional Court relates only to the EUR 250 million tax imposed for the year 2008. The Court might still have to rule on whether or not the tax of EUR 500 million for 2009 introduced by the Programme Act of 23 December 2009 is constitutional.

Brazil

Federal Court ruling on partial licence for works at Angra III (2009)

The 1st Federal Court (Angra dos Reis region) rendered a decision confirming the legality of the partial construction licence granted to Eletrobràs Termonuclear S.A. – Eletronuclear for preliminary works carried out at the Angra III nuclear power plant.

The public prosecutor had filed a public claim against the National Nuclear Energy Commission (*Comissão Nacional de Energia Nuclear – CNEN*) arguing that its granting of the partial construction licence for Angra III was not in compliance with Article 7 of Act 6.189/74, which does not explicitly mention partial construction licences. The prosecutor argued that CNEN, by granting a partial licence, had added a new category of licences to the existing regulations. He also pointed to the lack of satisfactory technical grounds on which to justify such a licence.

The Federal District Attorney and the CNEN’s Counsel established before the Court that Act 6.189/74 allows for a licence under specific conditions, as long as it is in accordance with

1. Decision No. 32/2010 of 30 March 2010.

CNEN's prerogatives and its protective norms and standards regarding the construction and operation of facilities intended for nuclear energy use. They argued that, given the nature and complexity of the undertaking and the regulatory experience required in accordance with CNEN standards, the partial licence does not contravene the principle of efficiency since CNEN, as a regulatory body, possesses extended prerogatives to supervise each step of the construction of the nuclear power plant. In addition, both gave evidence through diverse documents that a safety analysis had been conducted by CNEN during the ANGRA III licensing process to the extent required by the licence in question. On this particular issue, experts had already filed 48 technical reports none of which indicated any requirement that might prevent the granting of a partial construction licence for Angra III.

The arguments were accepted by the 1st Federal Court (Angra dos Reis region) which judged that CNEN, in mentioning the partial licence in its standards, acted within the limits of its regulatory powers. The number of technical reports was also considered a sufficient basis for CNEN to authorise the works at Angra III and it was noted that the judiciary is prevented, as a general rule, from breaching the executive's powers. Therefore, CNEN acted in accordance with the legal and technical parameters of its discretionary power and thus its non-compliance with the injunction order issued by the federal public prosecutor was legal.

Canada

Federal Court decision respecting intellectual property and trade-mark infringement action: Atomic Energy of Canada Ltd. v AREVA NP Canada Ltd² (2009)

Atomic Energy of Canada Ltd. (AECL) is a Canadian Crown-owned corporation in the business of selling nuclear services and wares; all existing nuclear reactors in Canada use AECL's CANDU technology. AREVA NP Canada Ltd. (AREVA) is the Canadian subsidiary of *Société des Participations du Commissariat à L'Énergie Atomique*, which is a majority state-owned French corporation. Both companies compete in the market of selling nuclear technology and services.

A recent decision of the Federal Court has dismissed the major aspects of a claim that was brought by AECL against AREVA, alleging violation of its intellectual property rights.

Background

In August 2006, AECL commenced an action against AREVA alleging trade mark infringement, passing off and copyright infringement, related to AECL's "Flying A Design Mark" (Registration No. TMA 160,039):



2. 2009 FC 980, varied by the same judge at 2009 FC 1119 *per* Zinn J. (Federal Court).

This summary is submitted by Jacques Lavoie and Lisa Thiele, Director and Deputy Director, respectively, of the Legal Services, Canadian Nuclear Safety Commission. Opinions expressed in this summary are those of the authors alone and do not purport to represent the views or the policies of the Canadian Nuclear Safety Commission or of the Government of Canada.

and AREVA's "A Design Mark" (Registration No. TMA 651,852):



AECL claimed that its trade mark had been infringed by AREVA, that AREVA had engaged in "passing off" contrary to Canada's Trade-marks Act,³ had depreciated the value of AECL's trade mark contrary to Section 22 of the Trade-marks Act and had infringed AECL's copyright in the mark.

In 2009, when the Federal Court considered a motion by AREVA to dismiss the action, both companies had submitted bids on a tender that had been issued by the Government of Ontario, Canada for construction of a new nuclear power plant. Also, and as the Court noted in its decision, the companies are in competition not only with respect to the sale of reactor technology, but also compete against each other in the nuclear steam generator tube cleaning business. The Court noted an ongoing patent infringement action between the parties, related to the technology used in tube cleaning.

The decision

By decision and order dated 30 September 2009, Mr. Justice Zinn of the Federal Court of Canada granted the motion by AREVA for summary dismissal of AECL's action: an order was issued dismissing the action and reasons were provided which addressed in some detail the reasons for the Court's findings with respect to trade mark infringement, passing off and copyright infringement. In a subsequent decision dated 2 November 2009, the Court clarified that there remained two issues that would proceed to trial and were not the subject of the summary judgement: AECL's claim for depreciation of goodwill and its claim that AREVA's trade mark registration in Canada was invalid.

Summary judgment

In Canadian court practice, a Court may decide a matter in a summary way, without trial. It is meant to be a useful tool, which can prevent claims or defences that have no real chance of success from proceeding to trial, thereby freeing the time that a Court would otherwise spend on the litigation, also reducing the time and money that litigants would otherwise have to incur. Generally, in the Federal Court of Canada, a motion seeking summary judgement must establish to the satisfaction of the Court that there is no genuine issue for trial. Each party to a summary judgement motion must put its best foot forward with respect to the existence or non-existence of material issues to be tried in the case.

If the Court is satisfied that there are genuine issues for trial, it is not on a summary judgment motion that those genuine issues are to be resolved. In addressing the issues in this case,

3. R.S.C. 1985, c. T-13, paragraphs 7(b) and (c) of which state:

No person shall

...

(b) direct public attention to his wares, services or business in such a way as to cause or be likely to cause confusion in Canada, at the time he commenced so to direct attention to them, between his wares, services or business and the wares, services or business of another;

(c) pass off other wares or services as and for those ordered or requested.

Mr. Justice Zinn noted the caution against having summary judgment motions inadvertently turn into summary trials on affidavit evidence. For this case, he did dismiss summarily some of the major aspects of the case, on the basis of the affidavit evidence that was provided, concluding there was no genuine issue for trial on those issues.

Trade mark infringement, passing off

On AECL's claim of trade mark infringement, the Court noted that success on an infringement action requires proof, on a balance of probabilities, of three things:

- (i) that the plaintiff is the registered owner of a trade mark;
- (ii) that the defendant is using an identical or substantially similar mark; and
- (iii) that the defendant's use may cause, or has caused, confusion.

Subsection 6(5) of the Trade-Marks Act provides a non-exhaustive list of factors to be considered in the examination of whether marks are confusing, as follows:

In determining whether trade marks or trade names are confusing, the Court or the Registrar, as the case may be, shall have regard to all the surrounding circumstances including:

- (a) the inherent distinctiveness of the trade marks or trade names and the extent to which they have become known;
- (b) the length of time the trade marks or trade names have been in use;
- (c) the nature of the wares, services or business;
- (d) the nature of the trade; and
- (e) the degree of resemblance between the trade marks or trade names in appearance or sound or in the ideas suggested by them.

For the Court, items (c) and (d) of subsection 6(5) above, were "of primary if not determinative importance" to the outcome of this case. Mr. Justice Zinn noted that it was difficult to imagine consumers that were more sophisticated, or a procurement process that was more prudent, than those in the nuclear power business, as evidenced by the affidavit evidence submitted on the motion. As a result of the nature of the nuclear trade, it was, to the Court, "quite simply impossible" that "any utility could be confused by the resemblance of the AREVA and AECL marks into purchasing a reactor from the 'wrong' company". The Court was satisfied that any "passing confusion" that might arise from the resemblance of the two marks "will always and in every case be dispelled through procurement processes before nuclear wares or services are actually purchased".

In addressing whether there might be confusion outside of the procurement process, the Court described the affidavit evidence that had been submitted by AECL as suggesting that a Canadian customer of nuclear wares and services could see AREVA's design mark on, for example, an engineer's hard hat and transfer to AECL whatever positive or negative associations he has made, thus influencing the customer's perception of the "brands". In dismissing this kind of confusion as realistic in the nuclear industry and especially in light of the way the two marks are actually used, the Court found:

“Th[is] confusion ... in my view can only be said to occur if one applies the wrong test. As Lord Denning said in *Newsweek Inc. v British Broadcasting Corp.*, [1979] R.P.C. 441 at p. 446:

The test is whether the ordinary, sensible members of the public would be confused. It is not sufficient that the only confusion would be to a very small, unobservant section of society; or, as Foster J. put it recently, if the only person who would be misled was “a moron in a hurry”.

In this industry, the fact that Homer Simpson may be confused is insufficient to find confusion”.

Finding that there was no genuine issue for trial respecting the trade mark infringement allegation, the Court summarily dismissed that claim.

Respecting the allegation of passing off, the Court noted that the same reasoning as expressed respecting trade mark infringement – namely, confusion – was dispositive of this claim. The Trade-marks Act explicitly targets passing off at paragraph 7(c).⁴ The law of passing off seeks to ensure that buyers know what they are purchasing and from whom and seeks to protect the interest of traders in their names and reputation.⁵ The three necessary components of passing off in Canada are: the existence of goodwill, deception of the public due to a misrepresentation and actual or potential damage to the plaintiff. It is the second component, deception, which involves confusion.

In this case, as the Court concluded that there was “no evidence of confusion by customers of these parties’ wares and services”, the claim of passing off was dismissed.

Copyright infringement

AECL also claimed that the AREVA design mark constituted copying of the AECL mark and therefore infringed the copyright owned by AECL in its mark. In order to find such copying, there must be a causal connection between the original and the allegedly copied work; the plaintiff must lead evidence of actual copying or of the defendant’s access to the work which, combined with substantial similarity, can lead to the inference of copying.⁶

On this issue, the Court noted that AREVA had produced a letter from the creator of AREVA’s mark, confirming that he had created the mark in 2001, and that at that time, he had no knowledge of the AECL flying A design. Since there was no evidence to contradict this letter, the Court found that it would overcome any inference of copying that might arise from the similarity. In light of this uncontradicted evidence that there had been no copying, the Court dismissed the claim of copyright infringement.

Reconsideration

Under the applicable rules of the Court, AECL subsequently asked the judge to reconsider his decision on the ground that the order that had been issued in September 2009, dismissing the action in its

4. Supra, at note 2.

5. *Kirkbi AG v Ritvik Holdings Inc.* 2005 SCC 65 *per* Le Bel J.

6. *Shewan v Canada (Attorney General)* (1999), 87 C.P.R. (3d) 475 (Ont. S.C.J.).

entirety, did not accord with the reasons given for the decision. AECL submitted that there remained two issues that the Court had not ruled upon in the summary judgment decision.

In his reasons for order and order, dated 2 November 2009, Mr Justice Zinn reconsidered his September decision. He first noted that Rule 397, which provides for reconsideration in defined and very specific circumstances, is a “defined exception” to the doctrine of *functus officio* by which a Court cannot revisit its decision once it has been made.

However, the Court agreed with AECL that its September 2009 order had dismissed the entire action, whereas the reasons had reflected only the Court’s consideration of three of the five issues.

Mr. Justice Zinn agreed that the order had to be reconsidered to accord with the reasons given for it and to reflect those reasons. He indicated that it was not intended in the reasons to dismiss the action in its entirety. Thus, in a new order, the Court amended the original order dismissing the action to state:

“This action shall proceed to trial on the Plaintiff’s claim for depreciation of goodwill pursuant to Section 22 of the Trade-marks Act, and on the Plaintiff’s claim that the registration of the A Design Mark is invalid; and on the Defendant’s counter claim”.

Conclusion

It is interesting, from a legal perspective, to view the way that courts see the nuclear industry, as evidenced in the decision in this case. No “hasty impression” test was considered applicable, with respect to whether there was or could be confusion, as a result of the Court’s findings on the nature of the nuclear industry.

The Court accepted that the relevant consumers in the nuclear industry would never be confused into purchasing a particular reactor “by mistake”. Also, the Court’s description of the nuclear reactor products and services business is instructive. The Court noted AREVA’s description of that business as follows:

“The market for nuclear products and services is extensively regulated. Suppliers of safety-related products must be government qualified and they are audited by CANPAC, a unified industry organisation, for quality. Procurement decisions involve multiple individuals conducting multiple reviews and approvals over a relatively long period of time. Customers often have master services agreements with suppliers for the provision of parts and services, which have been negotiated over a period of years. Nuclear reactor services that do go out for bid are multi-million dollar contracts. In this environment, customers are not confused [*sic*] with whom they are dealing”.

It seems clear that this is the evidence that the Court preferred over that presented by AECL to the effect that procurement decisions involve many individuals and not only those with technical expertise. The Court’s finding respecting there being no real risk of confusion is squarely based on the conclusion that the sophistication of the industry and the lengthy and detailed procurement processes would make any chance of “subtle influence on consumer behaviour” effectively impossible.

In Canada, then, the current jurisprudence would indicate that the nuclear industry has the most sophisticated of consumers who employ the most prudent of procurement processes, such that any conceivable passing confusion would be dispelled in every case before any nuclear wares or services are actually purchased.

On the issues arising in this case, it is important to note that there has been no final resolution. Along with the issues that remain to be tried before the Federal Court of Canada, both parties have also appealed the decision of Mr. Justice Zinn summarised above, and those appeals and cross-appeals have yet to be heard.⁷ As a result, on the individual facts of this case, a final determination has not been made, and we await the outcome of further judicial consideration of the issues.

United States

Judgement of a U.S. Court of Appeals on consideration of the environmental impacts of the risk of spent fuel pool fires (2009)

This case concerned a challenge to the U.S. Nuclear Regulatory Commission's (NRC) 1996 Generic Environmental Impact Statement (GEIS) for licence renewal. The GEIS found (among other things) that the risk of spent fuel pool fires at nuclear power plants was low and did not create a significant environmental impact within the meaning of the National Environmental Policy Act ("NEPA").⁸ NRC's regulations governing licence renewal implemented the GEIS finding.

Two states, Massachusetts and California, filed rulemaking petitions in 2006 and 2007, respectively, asking the NRC to reverse its 1996 GEIS and implementing rules on fire risk in spent fuel pools. The NRC consolidated and denied the petitions in 2008. The states of New York, Connecticut and Massachusetts filed a petition for judicial review in the U.S. Court of Appeals for the Second Circuit challenging the NRC's decision to deny the rulemaking petitions filed by Massachusetts and California. On 21 December 2009, a panel of three Second Circuit judges issued a *per curiam* decision, upholding the NRC's decision to deny the rulemaking petitions.⁹

Under NEPA, each federal agency must prepare an environmental impact statement (EIS) before taking a major action that significantly affects the quality of the "human environment".¹⁰ Under NRC regulations, the renewal of a licence for a nuclear power plant is a major action requiring an EIS.¹¹ This EIS covers both generic and plant-specific environmental impacts, two categories which the NRC has decided to treat separately. Category I impacts are common to all nuclear power plants, can be assigned a uniform significance level of small, moderate or large (even if the impact is not precisely the same at each plant) and do not require plant-specific kinds of mitigation. Category II impacts require an evaluation of individual sites. Since Category I impacts are common to each licence renewal, the NRC has produced a generic environmental impact statement (GEIS) that applies to these common issues.¹² The GEIS findings have been codified in NRC regulations.¹³

7. Court files A-445-09 and A-480-09, representing appeals and a cross-appeal of the Federal Court decision, are currently before the Federal Court of Appeal.

8. 42 U.S.C. § 4321 *et seq.*

9. *New York v NRC*, 589 F.3d 551 (2nd Cir. 2009).

10. 42 U.S.C. § 4332(2)(C).

11. 10 C.F.R. § 51.20.

12. *See* Final Rule, *Environmental Review for Renewal of Nuclear Power Plant Operating Licenses*, 61 Fed. Reg. 28,467 (5 June 1996).

13. 10 C.F.R. Part 51, Subpart A, Appendix B.

The NRC classifies on-site storage of spent fuel as a Category I issue that causes a small environmental impact. Massachusetts and California contended that the information in their rulemaking petitions showed a greater risk of fire from this source than previously known and that the environmental impact should no longer be discounted as small. Furthermore, they argued that the risk should be evaluated plant-by-plant.¹⁴ New York and California supported these original petitions.

On appeal, the states raised two primary arguments: 1) new information showed that the risk of a spent fuel pool fire is not so remote that, when considered in light of the potentially devastating effects, on-site storage in pools has a low environmental impact; and 2) the NRC's decision to deny the rulemaking petitions was arbitrary and capricious because it relied on plant-specific mitigation and security to support a finding that spent fuel pools generically have low environmental impacts.¹⁵ The Court rejected both arguments.

As to the first argument, the Court found that the NRC had already analysed most of the studies submitted in connection with Massachusetts' and California's petitions.¹⁶ The Court acknowledged that the NRC had not previously considered one study submitted by the states, but found that upon examination of the study, the NRC had reasonably concluded that it was not as accurate as other studies.¹⁷ Though the Court declined to address whether, as a matter of law, the NRC must take acts of terrorism into account when drafting an EIS about licence renewal. It did find as a factual matter that the NRC's GEIS had sufficiently considered potential acts of terrorism.¹⁸ The Court concluded that the studies relied on by the NRC constituted a sufficient "substantial basis in fact" for its conclusion that the overall risk of fires at spent fuel pools is low.¹⁹

In response to the second argument, the Court agreed that the NRC relied in part on mitigation strategies at nuclear power plants to conclude that the risk of an accidental or intentional fire in the pools is uniformly low.²⁰ However, the Court pointed out that the NRC has mandated that these mitigation tactics be implemented at all nuclear power plants, as well as requiring heightened security at all plants as part of its licensing process in the wake of the attacks of 11 September 2001.²¹ The Court pointed out that an agency may take into account attempts to mitigate an environmental impact when determining that an environmental impact is small enough not to require an EIS, so long as the effectiveness of the mitigation is demonstrated by substantial evidence.²² The Court found that the studies relied on by the NRC constituted such substantial evidence.²³

14. 589 F.3d at 553.

15. *Ibid* at 554.

16. *Ibid*.

17. *Ibid*.

18. *Ibid*.

19. *Ibid* at 555.

20. *Ibid*.

21. *Ibid*.

22. *Ibid* (citing *Nat'l Audubon Society v Hoffman*, 132 F.3d 7, 17 (2nd Cir. 1997)).

23. *Ibid*.

Judgement of a U.S. Court of Appeals on a licence to perform in situ leach uranium mining (2010)

This case concerned a challenge to the NRC's decision to issue Hydro Resources, Inc. ("HRI") a licence to conduct *in situ* leach mining for uranium on four sites in northwest New Mexico.²⁴ Petitioners consisted of the Eastern Dine Against Uranium Mining, a Navajo community organisation, Southwest Research and Information Center, a non-profit environmental education organisation, and two local ranchers, Grace Sam and Marilyn Morris. They sought judicial review of the NRC's licensing decision, asserting that in issuing the licence, the NRC violated the Atomic Energy Act of 1954 ("AEA") and the National Environmental Policy Act ("NEPA").²⁵ The Court denied the petition for review and upheld the NRC's licensing decision.²⁶

In 1988, HRI applied for a licence with the NRC to conduct *in situ* leach uranium mining at four locations in McKinley County, New Mexico, near the Navajo Indian Reservation. In 1997, the NRC, in co-operation with the Bureau of Indian Affairs and Bureau of Land Management, issued a final environmental impact statement, recommending that the NRC grant HRI's licence application. The NRC did so in January 1998, imposing a number of requirements on HRI. One of these requirements was for HRI to reclaim the site and restore the quality of the groundwater when HRI finished mining each site. HRI also had to provide a surety to cover the estimated cost of such efforts.

The petitioners were permitted to intervene and participate in the licence application proceedings, due to their "use [of] a substantial quantity of water personally or for livestock from a source... reasonably contiguous to either the injection or processing sites" for the proposed mining locations.²⁷ After issuing the licence to HRI, the NRC conducted an adjudicatory hearing.²⁸ The NRC ultimately upheld HRI's licence as it pertained to all four sites.²⁹ Petitioners then brought a petition for review to the U.S. Court of Appeals for the Tenth Circuit, challenging several of the NRC determinations pertaining to two of the New Mexico sites.³⁰

The first argument of petitioners was that the NRC failed to take into account the airborne radiation already being emitted at one site, contrary to the AEA, as amended by the Uranium Mill Tailings Radiation Control Act of 1978, and contrary to NEPA. The specific question in the case was whether the NRC regulation on dose limits to members of the public required the NRC, in deciding whether to grant HRI's licensing application, to consider only the negligible airborne radiation expected to result from HRI's new mining operation, or in the alternative, to aggregate the new (and minute) airborne radiation with already existing radioactive residue from a previously abandoned conventional mine site.³¹ The NRC had interpreted the regulation to mean that it only needed to

24. *Morris v NRC*, No. 07-9505, 2010 WL 761075 (10th Cir. 2010).

25. *Ibid* at *1.

26. *Ibid*.

27. *Ibid* at *2.

28. *See* 10 C.F.R. Part 2, Subpart L.

29. *See In re Hydro Resources, Inc.*, 47 N.R.C. 261 (1998).

30. *Morris v NRC*, No. 07-9505, 2010 WL 761075, *2 (10th Cir. 2010).

31. *Ibid* at *4. The NRC regulation at issue was 10 C.F.R. § 20.1301(a)(1), which states that: "(a) Each licensee shall conduct operations so that--(1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 mSv) in a year, exclusive of the dose contributions from background radiation, from any medical administration the individual has received, from exposure to individuals administered radioactive material and released under § 35.75, from

consider those emissions expected from the mining operations that HRI sought to licence.³² The Court agreed with the NRC's interpretation, finding that it was not "plainly erroneous" or inconsistent with the plain language of the regulation.³³ The Court also found that the NRC's interpretation was not contrary to any indication of the agency's intent when it initially promulgated the regulation.³⁴

The second argument of petitioners was that the NRC's consideration of airborne radiation at one site violated NEPA in two respects: 1) the NRC failed to consider the cumulative amount of airborne radiation that will be emitted from both the prior mining operation and the licensee's proposed mining operation; and 2) the NRC mischaracterised the airborne radiation as "background radiation".³⁵ The Court found that the NRC had met its NEPA obligations because it did sufficiently consider the cumulative environmental effect of the radioactive residue of past mining as well as that expected from the proposed operation.³⁶

The third argument of the petitioners was that the NRC's final environmental impact statement violated NEPA because it failed to take a "hard look" at the possible impact the mining would have on one site's groundwater quality, especially if the licensee proved unable to meet the restoration goals set forth in the licence.³⁷ However, based on the detailed analysis of the final environmental impact statement, including discussions of the techniques and costs of clean-up, the Court concluded that the NRC did take a "hard look" at the environmental impacts on groundwater, as required by NEPA.³⁸ For similar reasons, the Court found sufficient evidence in the administrative record to hold that the NRC's licensing decision was not arbitrary or capricious.³⁹

One judge dissented, stating that he would have rejected the NRC's interpretation of its own regulation to include only the prospective activities of the licensee.⁴⁰ Given that 10 C.F.R. § 20.1301(a)(1) expressly excludes "background radiation" and radiation from other specified sources, the dissenting judge found the NRC's interpretation of "licensed operation" flawed because in his view it rendered these specific exclusions superfluous. The dissenting judge also would not have excluded radioactive emissions from existing mining spoil as "background radiation", but would have included those emissions in the calculation of dose limits.⁴¹ He would have set aside the licensing decision because he perceived the NRC's interpretations of its own regulations to be unreasonable.⁴²

voluntary participation in medical research programs, and from the licensee's disposal of radioactive material into sanitary sewerage in accordance with § 20.2003...".

32. *Ibid* at *4 (10th Cir. 2010).

33. *Ibid* at *5.

34. *Ibid* at *6-7.

35. *Ibid* at *8.

36. *Ibid* at *8-10.

37. *Ibid*.

38. *Ibid* at *19-20.

39. *Ibid* at *17.

40. *Ibid* at *21-22.

41. *Ibid* at *22-23 (10th Cir. 2010).

42. *Ibid* at *23.

National Legislative and Regulatory Activities

Belarus

General legislation

Amendments to laws on the use of atomic energy (2009)

In 2009, several amendments were adopted to laws on the use of atomic energy in order to harmonise regulations, such as laws on the use of atomic energy, industrial safety, mass action, hygiene and well-being of the population, uniformity of measurements, protection of the population and land. The most important introduction is the designation of a legally competent supervisory authority in the field of nuclear safety. Currently, *Gospromnadzor*, which is a Department in the Ministry for Emergency Situations, is in charge of state supervision in the field of nuclear safety in Belarus.

Criminal law on acts concerning the use of radioactive sources and administrative law for non-criminal violations of radiation safety requirements (2009)

Following the ratification of the International Convention for the Suppression of Acts of Nuclear Terrorism by Belarus in 2006, both criminal and administrative penal laws were updated accordingly. There are two codes in this field, the 1999 Criminal Code and the 2003 Code of Administrative Non-criminal Violations.

The 1999 Criminal Code, as amended, provides sentences such as public work, fines, correctional labour, arrest, personal restraint or custodial restraint. Some sentences may further lead to the revocation of the right to occupy official positions or to practise certain professions, or to the confiscation of property. Fines are imposed according to the value in the Code of Administrative Non-criminal Violations.

Egypt

General legislation

Law on activities in the nuclear and radiation field (2010)

On 30 March 2010, the President of Egypt ratified a new comprehensive law governing nuclear and radiation related activities (Law No. 7 of 2010). The law aims at setting up a legislative framework on nuclear installations and activities in order to protect individuals, the environment and property. Since 1960, Egypt has adopted many laws and decrees which constitute the legal framework to regulate the peaceful uses of nuclear energy. In 2007, it was decided to review the legal framework and to draft a comprehensive nuclear law.

The new nuclear legislation contains provisions governing all elements of national nuclear activities, including provisions defining the objective and scope of the law, the regulatory body and its activities, regulations on radiation protection, nuclear safety, radioactive waste management, transport

of radioactive material, emergency preparedness and response, nuclear security, safeguards, import and export controls and civil liability in the case of nuclear damage.

Chapter 2 contains articles on the establishment of a regulatory body with the legal powers and technical competence necessary in order to ensure that operators of nuclear facilities and users of nuclear material and ionizing radiation sources operate and use them safely and securely. It provides the regulatory body with legal authority to issue regulations. Chapter 3 establishes a legislative framework for the licensing of nuclear facilities, and it regulates the safe management of nuclear materials and radiation sources to ensure that individuals, society and the environment are adequately protected against radiological hazards. It also contains provisions on the import, transit and export of radioactive materials. The new nuclear law provides for the regulatory body to issue the regulations with requirements for every stage of radioactive waste management.

The legislation implements obligations under international treaties and conventions to which Egypt is a contracting party.

France

Radioactive Waste Management

Decree establishing a Committee on industrial co-ordination of radioactive waste (2010)

Decree No. 2010-47 of 13 January 2010¹ establishes a Committee on industrial co-ordination of radioactive waste at the Directorate General for Energy and Climate of the Ministry of Energy. The Committee is operational from 16 January 2010 until 15 January 2015. It will formulate opinions and recommendations on the organisation, development and optimisation of radioactive waste management procedures, and it will monitor the financing of the construction, operation and supervision of radioactive waste depositories.

Third Party Liability

Law on the recognition and indemnification of victims of nuclear tests conducted by France (2010)

Law No. 2010-2 of 5 January 2010² on the recognition and indemnification of victims of nuclear tests envisages a specific procedure for the indemnification of individuals who suffered radio-induced illnesses as a result of their exposure to ionizing radiation due to nuclear tests conducted by France. It stipulates the conditions of residence at, or visit to the zones exposed to nuclear testing which allow them to claim indemnification.

The claims have to be submitted to an indemnification committee composed of medical experts which will be presided over by a State Councillor or a member of the Court of Cassation. This committee must abide by the principle of a fair hearing and will determine if the requirements for indemnification are met. If this is the case, a presumption of causality is established between the illness and the exposure. Within four months following the claim, the committee will present a recommendation to the Minister for Defence. The latter has two months to accept or reject indemnification based on the claim and the Committee's recommendation.

1. *Official Journal* of 15 January 2010, p. 787, text No. 5.

2. *Official Journal* of 6 January 2010, p. 327, text No. 1.

The list of illnesses, the composition of the indemnification committee, its organisation as well as its rules of procedure will be set out in an order-in-council.

Another advisory commission to follow up on the consequences of nuclear tests will be established, notably for the modification of the list of radio-induced illnesses, the composition and functioning of which will be subject to a separate order-in-council.

Germany

General legislation

Tenth Amendment to the Atomic Energy Act (2010)

On 1 January 2010, Article 1 No. 1 and Article 2 of the 10th Act to Amend the Atomic Energy Act of 17 March 2009³ entered into force; Article 1, Nos. 2 and 3, had already entered into force on 25 March 2009. The act covers two subjects: Amendment of Section 12b and insertion of a new Section 57b into the Atomic Energy Act, together with consequential amendments to other legislation.

Section 12b of the Atomic Energy Act establishes the legal framework for reviewing the trustworthiness of persons involved in nuclear activities with a view to preventing unauthorised acts of theft or release of radioactive substances. Based on the “11 September” experience and other terrorist acts, the new version of Section 12b broadens the number of administrative bodies and other entities to be involved in the review process. The competent authorities are granted comprehensive rights to request and use personal data.

The new Section 57b makes the operation and decommissioning of *Asse II Mine*, which was a trial storage facility for radioactive waste, subject to those provisions of the act which apply to the federal final waste repository pursuant to Section 9a paragraph 3 of the Atomic Energy Act. It requires the decommissioning of *Asse II Mine* without delay.

Act on Environmental Impact Assessment (2009)

A consolidated version of the Act on Environmental Impact Assessment as last amended by Act of 11 August 2009 was published in *Bundesgesetzblatt* 2010 I p. 94. The amended version came into effect on 2 March 2010.

Organisation and structure

Radiation Protection Commission (2009)

On 21 December 2009, the Federal Minister for the Environment, Nature Conservation and Nuclear Safety issued a revised version of the Statutes of the Radiation Protection Commission (*Strahlenschutzkommission – SSK*).⁴ The revised version replaces the Statutes of 1998 as amended 2007 (see *Nuclear Law Bulletin* No. 65). The SSK is, together with the Reactor Safety Commission (*Reaktorsicherheitskommission – RSK*), the main advisory body of the Ministry.

3. *Bundesgesetzblatt* 2009 I p. 556.

4. *Bundesanzeiger* 2010 No. 14 p. 289.

Radiation protection

Act on the Protection against Non-ionizing Radiation (2009)

On 29 July 2009, Parliament passed an Act on the Protection against Non-ionizing Radiation when Applied to Men.⁵ The act complies with the obligations under the EC Directive 98/34/EC of 22 June 1998 as amended by EC Directive 2006/96/EC of 20 December 2006.⁶ While parts of the act already entered into force on 4 August 2009, the entire act is effective as of 1 March 2010.

Transport of radioactive material

International transport of dangerous goods by road (2009)

The 20th Ordinance to Amend the Annexes A and B to the ADR-Agreement of 2 October 2009 was published in *Bundesgesetzblatt* 2009 II p. 1114. The Ordinance made effective the amendments to Annexes A and B to the Agreement of 30 September 1957 on the International Transport of Dangerous Goods by Road as adopted in Geneva on 28 – 30 October 2008. The ordinance entered into force on 1 July 2009.

Ireland

Radiation protection

Order to amend Regulations on Active Implantable Medical Devices (2010)

The above order was adopted as Statutory Instrument No. 109 for the purpose of giving full effect to Council Directive 2007/47/EC of 5 September 2007 amending Council Directive 90/385/EEC of 20 July 1990 (S.I. No. 253 of 1994) concerning active implantable medical devices. The regulations came into force on 21 March 2010.

According to the order, devices must be designed and manufactured in such a way that, when implanted, their use does not compromise the clinical condition or the safety of patients. They must not represent any risk to the persons implanting them or, where applicable, to other persons. Devices must be designed and manufactured in such a way as to remove or minimise as far as possible risks connected with ionizing radiation from radioactive substances included in the device, in compliance with the protection requirements laid down in:

- Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation.
- Council Directive 97/43/Euratom of 30 June 1997 on health protection of individuals against the dangers of ionizing radiation in relation to medical exposure.

5. *Bundesgesetzblatt* 2009 I p. 2433.

6. O.J. 1998 No. L 204 p. 37; 2006 No. L 363 p. 81.

Amendment to Medical Devices Regulations (2010)

The above order was adopted as Statutory Instrument No. 110 for the purpose of giving full effect to Council Directive 2007/47/EC of 5 September 2007 amending Council Directive 93/42/EEC of 14 June 1993 (S.I. No. 252 of 1994) concerning medical devices. The regulations came into force on 21 March 2010.

Devices must be designed and manufactured in such a way:

- That they will not compromise the clinical condition, the safety of patients, the safety and health of users or, where applicable, other persons.
- That exposure of patients, users and other persons to radiation shall be reduced as far as possible compatible with the intended purpose, whilst not restricting the application of appropriate specified levels for therapeutic and diagnostic purposes.
- As to ensure that, where practicable, the quantity, geometry and quality of radiation emitted can be varied and controlled taking into account the intended use.
- As to achieve appropriate image and/or output quality for the intended medical purpose whilst minimising radiation exposure of the patient and user.
- As to enable reliable monitoring and control of the delivered dose, the beam type and energy and where appropriate the quality of radiation.

Italy

General legislation

*Decree setting out rules for the siting, construction and operation of nuclear installations (2010)*⁷

On 15 February 2010, the Italian Council of Ministers issued Legislative Decree No. 31/2010 (hereinafter the “decree”) setting out rules for the siting, construction and operation on the national territory of nuclear power plants, nuclear fuel fabrication facilities, storage systems for spent fuel and radioactive waste, as well as compensatory measures and public information campaigns.

The decree, published in Official Gazette No. 55 on 8 March 2010, entered into force on 23 March 2010. It implements Article 25 of Law 23 July 2009 No. 99 (see *Nuclear Law Bulletin* No. 84) to the extent that it introduces a new legal framework in connection with the siting and operation of nuclear facilities in Italy.

1. The new licensing process for the siting and the authorisation of new nuclear power plants can be divided into five steps:
 - a. A nuclear strategy will be defined by the Italian Government 90 days following the entry into force of the legislative decree. The nuclear strategy will deal, *inter alia*, with the

7. Full text of the decree is reproduced on pp.115 *et seq.* of this *Bulletin*. For more ample information see articles by Iaccarino, F., “Resurgence of Nuclear Energy in Italy”, *Nuclear Law Bulletin* No. 84, pp. 65 *et seq.* and specifically on this decree see “Nuclear Renaissance in Italy – Maintaining Momentum”, in this edition of the *Bulletin*, pp. 65 *et seq.*

importance of nuclear energy to meet Italy's goals to cut greenhouse gas emissions, to ensure security of energy supply and to provide for lower and more reliable energy costs.

- b. Parameters of technical-environmental criteria for the site selection indicated in the decree will be proposed by the Nuclear Safety Agency and submitted for public consultation.
 - c. A strategic environmental assessment (SEA) will be carried out by the Ministry of Environment on the nuclear strategy and parameters of technical environmental criteria.
 - d. A site certification phase will be conducted by the Nuclear Safety Agency on sites proposed by operators, according to the SEA outcome. The Government will submit the sites certified under technical criteria for consultation and agreement with concerned regions and municipalities.
 - e. An application for a single authorisation (construction and operation) will be submitted to the Ministry for Economic Development after technical assessment by the Nuclear Safety Agency. Environmental impact assessment (EIA) and integrated pollution prevention and control (IPCC) procedures will be established by the Ministry of Environment. Those ministers will release the single authorisation by decree.
2. The legislative decree further provides for compensation to be paid by the licence holder and companies involved in the construction and operation of such facilities:
- Construction phase:
 - 3 000 EUR/MW per year for up to 1 600 MW realised on the site – plus 20% for higher powers – in favour of:
 - 40% to local authorities (10% to the province; 55% to the municipality where the plant is located); 35% to neighbouring municipalities in the range of 20 km from the plant's perimeter);
- 60% to the population and companies in the area surrounding the site by reducing their energy charges and local taxes.
- Operation phase:
 - 0,4 EUR/MWh of the electricity produced and transmitted during the entire operating life of the plant. Such benefit shall be applied to local authorities where the plant is located and used for the power supply charge reduction of site's end users.
3. The legislative decree provides for the creation of a decommissioning fund:
- a. It establishes an external fund, owned by a public body and fed by the licence holder's annual contribution for each operating year of the facility.
 - b. The amount of the contribution is determined by the Independent Authority for Electricity and Gas (AEEG), following a proposal by the public entity in charge of decommissioning (Sogin) and the Nuclear Safety Agency's advice.

- c. If, at the end of the plant life-cycle, the decommissioning fund is not adequate, the operator has to adapt it.
 - d. The decommissioning of the facilities will be carried out by Sogin which, at the end of the plant's life-cycle, will be in charge of its safe management.
4. The legislative decree also provides for the siting and construction of a national waste disposal facility:
- a. Sogin creates a technology park where a national disposal project will be realised which will be used as a final repository for low and medium-level radioactive waste and temporary long-term storage of high-level radioactive waste and spent fuel.
 - b. Compensation has to be paid by Sogin to the area where the technology park is located. The compensation shall be proportional to the radioactive waste placed in the disposal facility.
 - c. The procedures of site licensing, construction and operation are similar to those for new nuclear power plants.
 - d. Charges for the delivery of radioactive waste and spent nuclear fuel to the national disposal facility are fixed annually by the AEEG based on the costs estimated by Sogin.
5. The decree enables the Government to issue, by ministerial decree, the programme for a national information campaign, including financial needs, resources, information content and those involved in implementing the information campaign.

Romania

General legislation

Law on the reorganisation of public authorities (2009)

On 5 November 2009, the Romanian Parliament adopted Law No. 329 on the reorganisation of public authorities and institutions, streamlining of public expenditures *et al.*⁸

In the nuclear field, the act dissolved both the Nuclear Agency and the National Agency for Radioactive Waste and merged them into the new Nuclear Energy and Radioactive Waste Agency which will be financed by its own revenues and by state subsidies through the budget of the Ministry of Economy. The National Commission for Nuclear Activities Control will be fully self-financed, subordinated to the Government and co-ordinated by the Prime-Minister through a State Counsellor. Finally, the National Agency for Export Control will become a Department of the Ministry of Foreign Affairs.

Following the act, the Government adopted Decision No. 1437 of 18 November 2009⁹ which approves the organisation, operating regulations and structure of the new Nuclear Energy and Radioactive Waste Agency. According to the regulations, the new agency is the national authority in

8. Published in the *Official Journal of Romania* No. 761 of 9 of November 2009.

9. Published in Part I of the *Official Journal of Romania* No. 865 of 11 December 2009.

charge of promoting, developing and monitoring nuclear activities for exclusively peaceful purposes, including the safe management of radioactive waste and its final disposal. The agency is established and operates as a specialised body of the central public administration, with legal personality, and subordinated to the Ministry of Economy, Trade and Business. The purpose of the agency is to provide specialised technical assistance to the Government. It will elaborate the national strategy for the development of the nuclear field and the national nuclear programme with the assistance of ministries, other bodies of the central and local administration, operators and professional associations which operate in the nuclear field as well as representatives of civil society.

Government Decision on the reorganisation of electric power producers (2010)

On 29 January 2010, the Government adopted Decision No. 56 on the Reorganisation of Electric and Thermal Energy Producers, an entity subordinated to the Ministry of Economy, Commerce and Business. The decision provides for the establishment of the National Company Electra S.A. and the National Company Hidroenergetica S.A.¹⁰

The foundation of the two companies entailed the merger and dissolution of various commercial companies in the field.

The main objective of the National Company *Electra S.A.* is the generation and supply of electricity, the generation, transport, delivery and supply of thermal energy, mining and lignite quarry excavation and nuclear fuel fabrication. The main objectives of the National Company *Hidroenergetica S.A.* is the generation and supply of electricity, the generation, transport, delivery and supply of thermal energy and coal mines excavation. Both companies may develop other related activities for the effective implementation of their main objectives in accordance with the legislation in force and their own statute.

The National Company *Nuclearelectrica S.A.*, the operator of Units 1 and 2 of Cernavoda nuclear power plant and the only nuclear energy producer of Romania, shall no longer be an independent legal entity but a branch (without legal personality) of the newly established National Company *Electra – S.A.*

Slovak Republic

General legislation

Amendment of the Atomic Act (2009)

An amendment to Atomic Act No. 541/2004 Coll. was adopted on 3 March 2010.¹¹ The amendment reinforces the physical protection of nuclear installations by bringing into force the duty to scan biometric data.

10. This decision was published in the *Official Journal of Romania* No. 80 of 5 February 2010.

11. Published in the *Collection of Laws* under No. 120/2010 Coll.

Spain

Radioactive waste management

Law regulating limited investment companies quoted on the real estate market (2009)

Law 11/2009 of 26 October, which is not exclusively devoted to nuclear matters, contains a number of provisions as regards radioactive waste management in Spain and its financing by the “fund for the financing of the activities included in the general radioactive waste plan”.

The law adds a new Article 38(b) to Act 25/1964 (Nuclear Energy Act) which establishes that the management of radioactive waste, including spent nuclear fuel and the dismantling and decommissioning of nuclear facilities is an essential public service assigned exclusively to the state. The Spanish national radioactive waste management agency ENRESA (*Empresa Nacional de Residuos Radiactivos, S.A.*) is commissioned to carry out the respective works, and serves as a technical service of the administration under the Ministry of Industry, Tourism and Trade via the Secretariat of State for Energy. It is also stipulated that the state is the owner of the radioactive waste once it has been definitively disposed of.

Furthermore, the law modifies Law 54/1997 in order to regulate the financing of radioactive waste management activities by the aforementioned fund. This fund is comprised of fees to be paid to the Public Treasury as a non-budget item and then released to the fund. An important new provision is that costs incurred as of 1 January 2010 for the management of radioactive waste and spent fuel generated at operating nuclear power plants will be financed by the licensees regardless of the date of their generation (contrary to Royal Decree-Law 5/2005 which had established that licensees would finance the cost of managing radioactive waste generated only as of 1 April 2005).

Ukraine

General legislation

Overview of recent amendments to laws in the field of nuclear energy (2009)

1. Amendment to the Law on electricity with respect to the export of electricity of 19 March 2009, No. 1164-VI:
According to this law, electricity can only be exported at a wholesale market price and access to the electricity systems for the export will be given following a bidding process.
2. Amendment to the Law on state control of economic activities of 23 June 2009, No. 1546-Y1:
The amendment concerns the nuclear energy field in that it states that the control of economic activities does not include the control of activities in the area of nuclear safety and radiation protection. It aims at strengthening the special state supervision in this field.
3. Amendments to the law on the siting, planning and construction of nuclear installations of 25 June 2009, No. 1566, entered into force on 23 July 2009:
The amendments aim at improving the decision-making procedure on siting, planning and the construction of nuclear installations.
4. Amendment to laws on the protection of the population in the vicinity of uranium mines and nuclear facilities of 17 November 2009, No. 1565-VI.
5. Amendments to laws in relation to the ratification by Ukraine of the Amendment to the Convention on the Physical Protection of Nuclear Materials of 17 November 2009, No. 1718-Y1.

Text

Italy

Legislative Decree

setting out rules for the siting, construction and operation on the national territory of nuclear power plants, nuclear fuel fabrication facilities, storage systems for spent fuel and radioactive waste, as well as compensatory measures and public information campaigns

in accordance with Article 25 of Law No. 99 of 23 July 2009

The President of the Republic

HAVING REGARD TO Articles 76 and 87 of the Constitution;

HAVING REGARD TO Law No. 99 of 23 July 2009 containing “Provisions for the development and internationalisation of businesses, with particular reference to energy” and in particular, Article 25 of the aforementioned Law No. 99 of 23 July 2009;

HAVING REGARD TO Law No. 400 of 23 August 1988 setting out the “Framework regulating the activities of Government and the Presidency of the Council of Ministers”, as amended;

HAVING REGARD TO Law No. 1860 of 31 December 1962 concerning the “Peaceful use of nuclear energy”, as amended and supplemented by Decree of the President of the Republic No. 1704 of 30 December 1965, Law No. 1008 of 19 December 1969 and Decree of the President of the Republic No. 519 of 10 May 1975;

HAVING REGARD TO Law No. 393 of 2 August 1975 setting out “Regulations concerning the siting of nuclear-electric power plants and the production and use of electricity”;

HAVING REGARD TO Legislative Decree No. 230 of 17 March 1995, as amended and supplemented by Legislative Decrees Nos. 241 of 26 May 2000, 257 of 9 May 2001 and 23 of 20 February 2009, concerning the “Implementation of the 89/618/Euratom, 90/641/Euratom, 96/29/Euratom and 2006/117/Euratom directives on ionizing radiation”;

HAVING REGARD TO Law No. 481 of 14 November 1995 setting out “Rules for competition in and regulation of public utility services. Establishment of the regulatory authorities for public utility services”;

HAVING REGARD TO Legislative Decree No. 300 of 30 July 1999 concerning the “Reform of the structure of Government pursuant to Article 11 of Law No. 59 of 15 March 1997”, as amended;

HAVING REGARD TO Law No. 150 of 7 June 2000 concerning the “Regulation of communication and information provision from the public authorities”;

HAVING REGARD TO the Directive of the President of the Council of Ministers of 27 September 2000 containing the “Directive on the programme of institutional information and communication initiatives of the State Authorities”;

HAVING REGARD TO Law No. 368 of 24 December 2003 concerning the “Translation into law, with amendments, of Decree Law No. 314 of 14 November 2003 containing urgent measures for the collection, disposal and storage of radioactive waste under conditions of maximum safety”;

HAVING REGARD TO Law No. 239 of 23 August 2004 concerning the “Reorganisation of the energy sector and authorisation for the Government to recast existing energy-related measures”, containing, in paragraphs 99 to 106 of Article 1, additions to the provisions of Decree Law No. 314 of 14 November 2003, as converted, with amendments, by Law No. 368 of 24 December 2003;

HAVING REGARD TO Legislative Decree No. 195 of 19 August 2005 implementing directive 2003/4/EC on public access to environmental information;

HAVING REGARD TO Law No. 282 of 16 December 2005 concerning the “Ratification of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, adopted in Vienna on 5 September 1997”;

HAVING REGARD TO Legislative Decree No. 152 of 3 April 2006 concerning “Environmental standards”;

HAVING REGARD TO Legislative Decree No. 52 of 6 February 2007 concerning the “Implementation of the 2003/122/EC Euratom Directive on the control of high-activity sealed radioactive sources and orphan sources”;

HAVING REGARD TO Legislative Decree No. 4 of 16 January 2008 concerning “Amendments and supplementary provisions to Legislative Decree No. 152 of 3 April 2006 on environmental standards”;

HAVING REGARD TO Article 7 of Decree-Law No. 112 of 23 June 2008, as converted by Law No. 133 of 6 August 2008;

HAVING REGARD TO Directive 2009/71/Euratom of the Council of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations;

HAVING REGARD TO the preliminary resolution of the Council of Ministers, adopted at the session of 22 December 2009;

HAVING REGARD TO the resolution adopted at the meeting of the Council of Ministers on 22 January 2010 on the emergency procedure, pursuant to Article 3 paragraph 4 of Legislative Decree No. 281 of 28 August 1997;

ACKNOWLEDGING that the session of 27 January 2010 of the Unified Conference referred to in Article 8 of Legislative Decree No. 281 of 28 August 1997, as amended, on whose agenda the present Legislative Decree was to be debated, did not take place;

IN THE LIGHT OF the opinion of the Council of State at the sitting of the advisory section for legislative instruments on 8 February 2010;

HAVING DECIDED that the text be adapted in accordance with the observations of the Council of State, considering the indications concerning the implementation of Article 25 paragraph 5 of Law No. 99 of 23 July 2009, and also with the need not to modify the plans for the strategic environmental assessments at national level and to consider the particular technical issues relating to spent fuel and radioactive waste;

IN THE LIGHT OF the opinions of the competent commissions of the Chamber of Deputies and the Senate of the Italian Republic;

HAVING REGARD TO the resolution adopted at the meeting of the Council of Ministers on 10 February 2010;

IN RELATION TO THE PROPOSAL of the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea, the Minister for Infrastructure and Transport and the Minister for Legislative Simplification:

Hereby issues
the following Legislative Decree:

TITLE I

General Provisions

Article 1

(Subject)

1. This decree implements the revised rules on the siting on the national territory of nuclear power plants, nuclear fuel fabrication facilities, systems for storing spent fuel and radioactive waste, and establishes:
 - a) the licensing procedures and subjective requirements applicable to the operators involved in the construction, operation and decommissioning on the national territory of the plants referred to in Article 2 paragraph 1(e) and in the operation of facilities for storing spent fuel and radioactive waste located on the same site as the aforementioned plants and directly connected to them;
 - b) a fund for decommissioning nuclear power plants;
 - c) measures regarding the compensation in relation to the construction and operation of the plants referred to in point a) to be paid to the residents and businesses operating in the vicinity of the site and the local authorities affected;
 - d) regulations concerning the siting of the national waste repository, allied to a technology park including a study and experimental research centre, for storing radioactive waste arising from previous and future operation of nuclear (and similar) plants on the national territory;
 - e) licensing procedures for the construction and operation of the national waste repository and the technology park;
 - f) measures regarding the compensation in relation to the operation of the national waste repository to be paid to residents and businesses operating in the vicinity of the site and the local authorities affected;
 - g) a programme for establishing and implementing a “national information campaign on energy production from nuclear sources”;
 - h) penalties applicable in the event of a breach of the provisions of this decree.

Article 2

(Definitions)

1. The following definitions shall apply for the purposes of this decree:
 - a) “Agency” is the Nuclear Safety Agency referred to in Article 29 of Law No. 99 of 23 July 2009;
 - b) “suitable site” is a portion of the national territory which meets environmental and technical requirements and which conforms with the relevant reference parameters defining its suitability as a site for a nuclear power plant;
 - c) “site” is the portion of the suitable site which has been certified as fit to accommodate one or more nuclear power plants;
 - d) “Unified Conference” is the Conference referred to in Article 8 of Legislative Decree No. 281 of 28 August 1997, as amended;
 - e) “nuclear power plants” are the plants which use nuclear power to generate electricity and the nuclear fuel fabrication facilities constructed on sites, including the associated installations and related activities, as well as the facilities located on the same site for storing spent fuel and the radioactive waste relating directly to the nuclear power plant, the infrastructure required to operate said plants and facilities, the facilities for developing and adapting the national electricity transmission network needed for the energy generated to be supplied to the network, and any access roads;
 - f) “operator” is the natural or juridical person or the consortium of natural or juridical persons expressing an interest in or holding a licence for the commissioning and operation of a nuclear power plant;
 - g) “IAEA” is the United Nations International Atomic Energy Agency, based in Vienna;
 - h) “OECD/NEA” is the OECD Nuclear Energy Agency, based in Paris.
 - i) “national waste repository” is the national waste repository for the permanent disposal of low- and medium-level radioactive waste arising from industrial, research and medical/health activities as well as from the previous nuclear power plant management regime and the provisional long-term storage of high-level waste and spent fuel from nuclear power plant operations, including waste arising from the previous nuclear power plant management regime.
 - l) “Nuclear Strategy” refers to the policy document outlining the Government’s strategic nuclear objectives.

Article 3

(Government Nuclear Strategy)

1. Within three months following the entry into force of this decree, the Council of Ministers, at the instigation of the Minister for Economic Development, with the support of the Agency, in

conjunction with the Minister for Infrastructure and Transport, the Minister for the Environment, Land and Sea and the Minister for Education, Universities and Research, shall adopt a policy document outlining the Government's strategic nuclear objectives, including, as a priority, protection from ionizing radiation and nuclear safety. This document specifies the total rated power along with the anticipated timescales for the construction and commissioning of the nuclear power plants, and the research and training work involved. It evaluates the contribution of nuclear power in terms of safety and energy diversification, the reduction of pollutant and greenhouse gas emissions, together with the economic and social benefits, whilst setting out guidelines for the implementation process.

2. The Nuclear Strategy represents an integral part of the national energy strategy referred to in Article 7 of Decree-Law No. 112 of 25 June 2008, as converted, with amendments, by Article 1 paragraph 1 of Law No. 133 of 6 August 2008.
3. In particular, the Nuclear Strategy sets out:
 - a) the reliability of nuclear energy in terms of environmental nuclear safety and plant safety, any impact on the radiological protection of the population and in relation to proliferation risks;
 - b) the benefits in terms of security of supply resulting from the introduction of nuclear energy as a significant new source in the national energy market;
 - c) the electrical power capacity objectives to be established in relation to national energy needs and the associated timescales;
 - d) the planned contribution, as a result of the recourse to nuclear energy as a low-carbon technology, to the achievement of the environmental commitments undertaken at European level in the context of the climate and energy package as well as to the reduction of chemical and physical pollutants;
 - e) the system of international alliances and co-operation and the capacity of the industry at national and international levels to meet the planned objectives;
 - f) an outline of the approach to achieving time- and cost-efficient implementation and the provision of guarantees, including through the formulation or planned issuance of specific guidance;
 - g) guidance concerning the management of radioactive waste and the decommissioning of plants at the end of their life cycle, for new installations and decommissioned plants;
 - h) the anticipated benefits for the Italian industry and the parameter framework for compensation of the public and the business sector;
 - i) the national electricity network's transmission capacity, with a proposal to upgrade it, should that prove necessary, to meet the installed capacity target;
 - l) objectives concerning the supply, processing and enrichment of nuclear fuel.

TITLE II

Single procedure for the siting, construction and operation of nuclear power plants; measures concerning the economic benefits for residents, local authorities and businesses; provisions governing the decommissioning of plants

Article 4

(Nuclear power plant licensing)

The construction and operation of nuclear power plants are considered activities of compelling interest to the state and, as such, are subject to a single licence which is issued to the operator after an application process and is subject to agreement with the Unified Conference, by decree of the Minister for Economic Development in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, in accordance with the provisions of this legislative decree.

Article 5

(Operator requirements)

1. The operators, including when operating in partnership, must possess the technical and professional capabilities required by the current provisions, as regards safety in particular, and have suitable and proven human and financial resources in relation to the activities in which they are to be engaged, including the planning, construction and operation of nuclear power plants, the storage and management of radioactive waste, and observance of IAEA recommendations.
2. The criteria setting out the requirements referred to in paragraph 1, together with the procedures for demonstrating compliance with those requirements, are established by decree of the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, to be issued within 30 days of the issue of the CIPE Resolution referred to in Article 26 paragraph 2 of the Law of 23 July 2009.
3. Licences for constructing, operating and decommissioning plants cannot, however, be awarded to parties:
 - a) which are bankrupt or subject to compulsory winding-up or composition agreements, or which are the subject of current proceedings for the declaration of one of the above situations;
 - b) in relation to which proceedings are pending for the application of one of the preventive measures set out in Article 3 of Law No. 1423 of 27 December 1956 or one of the impediments stipulated in Article 10 of Law No. 575 of 31 May 1965; the exclusion and debarment are operative if the outstanding proceedings concern the proprietor or technical manager (for a sole proprietorship), the partners or the technical manager (for a general partnership), the active partners or the technical manager (for a limited partnership), or the directors with powers of representation or the technical manager (for other types of company);

- c) which have been the subject of an adverse decision that has become *res judicata*, or a final criminal conviction, or a sentence applying a penalty requested, pursuant to Article 444 of the Italian Code of Criminal Procedure, for serious offences against the state concerning their professional conduct; in any case, a *res judicata* conviction for one or more offences of involvement in a criminal organisation, corruption, fraud or money laundering is grounds for debarment; the exclusion and debarment are effective if the sentence or judgement were issued in relation to: the proprietor or technical manager (for a sole proprietorship), the partners or the technical manager (for a general partnership), the active partners or the technical manager (for a limited partnership), the directors with powers of representation or the technical manager (for other types of company or consortium);
 - d) which have violated the prohibition on trust companies imposed by Article 17 of Law No. 55 of 19 March 1990;
 - g) which have been definitively adjudged in breach of their tax payment obligations, under the law of Italy or that of the state in which they have been established;
 - i) which have been definitively adjudged in serious breach of the national insurance and social security contribution legislation under the law of Italy or that of the state in which they have been established.
4. The operator shall declare that none of the impediments in paragraph 3 are applicable by means of a declaration equivalent to a certificate of compliance with the provisions of Decree No. 445 of the President of the Republic of 28 December 2000, in which any expunged convictions are also to be stated.
 5. For the purposes of the declarations concerning the impediments as in paragraph 3, Article 43 of Decree No. 445 of the President of the Republic of 28 December 2000 shall apply.

Article 6

(Operator work plans)

On their own initiative or on request from the Ministry of Economic Development, the operators mentioned in Article 5 submit their plan of work for the development of nuclear power plants to the aforementioned Ministry, in line with the policy guidelines provided by the Government in accordance with Article 3 and the CIPE Resolutions referred to in Article 26 of Law No. 99 of 23 July 2009. Having assessed whether the operator conforms to requirements, the Ministry of Economic Development sends a copy of the plans to the Ministry of the Environment, Land and Sea and to the Ministry of Infrastructure and Transport. The work plan, which does not concern the siting of plants, is covered by the provisions concerning access to files, pursuant to Law No. 241 of 7 August 1990 and Legislative Decree No. 195 of 2005.

Article 7

(Measures concerning technical verification of the requirements applicable to nuclear power plants)

Operators seeking to build nuclear power plants apply to the Agency to have the necessary checks made for the preliminary safety report, informing the Ministry of Economic Development at the same

time. The Agency ensures that the plants meet the optimum international safety standards set by the IAEA and the guidelines and best practices recommended by the OECD/NEA. Approvals of requirements and technical specifications applicable to nuclear power plants which have already been granted within the previous ten years by the competent authorities of member countries of the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA), or by the competent authorities of states with which bilateral agreements for technological and industrial co-operation in the nuclear sector have been signed, are accepted as valid in Italy subject to the approval of the Agency. The Agency carries out the checks requested and conveys its findings to the operator concerned and, for information, to the Ministry of Economic Development, within 90 days of the application being sent.

Article 8

(Specifications for suitable sites for nuclear power plants)

1. Potential nuclear power plant sites are identified in accordance with technical criteria, international best practice and current relevant legislative provisions in order to ensure safety levels which are suitable to safeguard the health of the population and protect the environment. Within sixty days of adopting the policy document referred to in Article 3 paragraph 1 the Ministry of Economic Development, in conjunction with the Ministry of the Environment, Land and Sea, the Ministry of Infrastructure and Transport and the Ministry of Cultural Heritage and Activities, establishes a set of parameters embodying the technical criteria, based on a proposal by the Agency to be drawn up within thirty days following the adoption of the aforementioned policy document, in line with it and on the basis of the inputs and technical and scientific data provided by public research bodies, including ISPRA (the Institute for Environmental Protection and Research), ENEA (the National Agency for new Technologies, Energy and Sustainable Economic Development) and the universities, which will put forward their views within the same timeframe. The parameter set will give particular consideration to the following aspects:
 - a) population and socio-economic factors;
 - b) hydrology and water resources;
 - c) meteorological factors;
 - d) biodiversity;
 - e) geophysics and geology;
 - f) natural beauty;
 - g) architectural and historical merit;
 - h) accessibility;
 - i) seismic and tectonic characteristics;
 - m) distance from inhabited areas and from transport infrastructure;

- n) strategic value of the area for the energy system and characteristics of the electricity network;
 - o) potential risks induced by human activities in the surrounding area.
2. The parameter set referred to in paragraph 1 is to be published on the websites of the Ministry of Economic Development, the Ministry of the Environment, Land and Sea, the Ministry of Infrastructure and Transport and the Agency. At the same time, its publication will also be advertised in at least five national daily newspapers in order to enable the regions, local authorities and qualified stakeholders to formulate comments and technical proposals, which should be submitted to the Agency in writing (and not anonymously) via a duly specified e-mail address within sixty days following the publication of the parameter set. The notifications on the websites and in the daily newspapers indicate the offices where the documents can be consulted in full, together with the process, the timescales, format for formulating comments or proposals and associated guidance. This public consultation is carried out in compliance with the principles and measures in Law No. 241 of 7 August 1990.
 3. For the purposes set out in Article 9, the Ministry of Economic Development, in conjunction with the Ministry of the Environment, Land and Sea, the Ministry of Infrastructure and Transport and the Ministry of Cultural Heritage and Activities, adopts the final parameter set referred to in paragraph 1 by decree. This decree is adopted within thirty days of the end of the consultation period referred to in paragraph 2; the initial parameters are updated on the basis of recommendations made by the Agency in the light of comments received. There must be a sufficient reason for rejecting comments. The outcomes of the consultation are published on the websites referred to in paragraph 2.

Article 9

(Strategic environmental assessment and resulting updates to the Nuclear Strategy)

1. The Nuclear Strategy described in Article 3, together with the parameters concerning the environmental and technical characteristics of the suitable sites referred to in Article 8 paragraph 3 is subject to the strategic environmental assessment procedures pursuant to and in accordance with Legislative Decree No. 152 of 3 April 2006 as amended, in addition to compliance with the principle of justification mentioned in Directive 96/29/EURATOM of the Council of 13 May 1996.
2. The Ministry of the Environment, Land and Sea is responsible for running the public consultation, in accordance with the principles and provisions set out in Legislative Decree No. 152 of 3 April 2006 and pursuing initiatives aimed at facilitating broad participation in the process.
3. Once the strategic environmental assessment procedure has been completed, the Minister for the Environment, Land and Sea informs the Ministry of Economic Development and the Ministry of Infrastructure and Transport of the reasoned opinion adopted in conjunction with the Minister for Cultural Heritage and Activities, for those aspects within its remit.
4. The Ministry of Economic Development, the Ministry of the Environment, Land and Sea, and the Ministry of Infrastructure and Transport update the parts of the Strategy and the provisions set out in paragraph 1 which fall within their respective remits, in line with the conclusions of the strategic environmental assessment, and submit the documents thus updated for the approval

of the Council of Ministers. The approved documents are published in the *Official Gazette of the Italian Republic*.

Article 10

(Application for certification of sites)

1. Within ninety days of publication, referred to in Article 9 paragraph 4 each interested operator initiates the single licence procedure by submitting their application for the certification of one or more sites for use as the location for a nuclear power plant to the Ministry of Economic Development and the Agency.
2. Additional applications may be submitted by 30 June of each year.
3. The application referred to in paragraph 1 must contain at least the data and information for each site as indicated below (otherwise it will be rejected). This content has been analytically established by decree of the Minister for Economic Development in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, having consulted the Agency, to be issued within 90 days of the entry into force of the present decree, concerning:
 - a) the identity of the applicant, complete with the information on the requirements specified under Article 5;
 - b) a precise description of the planned site for the plant and the ownership of the rights to this area;
 - c) an initial plan of the plant, indicating the type of installation, its main technical specifications, its operating principles and stating the maximum installed capacity;
 - d) mapping locating the perimeter of the plant within the specified site;
 - e) documentation concerning the technical surveys carried out on the site;
 - f) documentation concerning the preliminary safety report referred to in Article 7;
 - g) documentation concerning the environmental impact assessment;
 - h) documentation concerning the instruments of land use planning and environmental and countryside protection;
 - i) a list of the easements to be established for third party real assets for the construction and operation of the plants and associated activities;
 - l) all other technical documentation needed to demonstrate and verify the conformance of the selected site to environmental and technical requirements and to the related reference parameters referred to in Article 8 paragraph 1 and the conformance of the plan to the Nuclear Strategy.

Article 11

(Site certification)

1. Without prejudice to the responsibilities of the entities charged with protecting the environment under current legislation, the Agency carries out the technical assessment of the individual applications referred to in Article 10 paragraph 1 after establishing that these applications have followed the correct formal procedure and the relevant documentation has been provided, within 30 days of receipt.
2. The Agency may request additional information and clarification from the operators once only in relation to any technical issues and will indicate the means and timescales for complying with such requests. Any such request has suspensory effect on the timescales referred to in paragraph 3 until such time as the required information has been received.
3. Provided that the outcome of the assessment process is successful, the Agency will issue the certification for each site proposed within ninety days of the expiry of the term referred to in paragraph 1 or from receipt of the additional information and clarification referred to in paragraph 2. The issue of certification, which may be subject to specific conditions, is conditional on the site's compliance with:
 - a) the environmental and technical requirements and to related reference parameters referred to in Article 8 paragraph 1 which have been approved referred to in Article 9 paragraph 4,
 - b) the technical choices in relation to the interaction between site and plant,
 - c) the Nuclear Strategy referred to in Article 3, with regard to the production capacity of the plant, the planned implementation timescale and commissioning date, and the proposed technologies.
4. The Agency sends the certificates for the sites to the Ministry of Economic Development, the Ministry of the Environment, Land and Sea, and the Ministry of Infrastructure and Transport.
5. Within thirty days, the Minister for Economic Development submits each of the certified sites for the agreement of the Region involved, which makes its comments after obtaining the view of the municipality involved.
6. Should the agreement referred to in paragraph 5 not be reached within sixty days of the request of it being received, an Inter-institutional Committee is established within the following thirty days. Its members are appointed so as to ensure equal representation, respectively, of the Ministry of Economic Development, the Ministry of the Environment, Land and Sea and the Ministry of the Infrastructure and Transport, on the one hand, and the Region, on the other, which will ensure the presence of a representative of the municipality concerned. The operation of the Inter-institutional Committee is established by decree of the Minister for Economic Development, with the prior opinion of the Unified conference, which is to be provided within thirty days of request; the members of the Committee are not paid for their services. Should it not be possible to establish the Inter-institutional Committee, or should agreement still not be reached within sixty days after the establishment of the Committee, the agreement is made by decree of the President of the Republic, after discussion at the Council of Ministers with the additional presence of the president of the Region affected.

7. The agreement or the decree of the President of the Republic referred to in paragraph 6 also operate by way of derogation from the Environmental energy plans of the Regions affected by each possible siting.
8. At the end of the procedure described in paragraphs 4, 5 and 6, the Minister for Economic Development conveys the list of certified sites, in relation to which the regional agreement has been reached or the decree *in lieu* issued, to the Unified Conference pursuant to Article 8 of Legislative Decree No. 281 of 28 August 1997, which expresses its opinion within the timeframe set out in Article 3 of the aforementioned legislative decree and, in any case, not more than sixty days after receipt of the associated request. If no agreement is reached within this timescale, the Council of Ministers makes a reasoned decision, in accordance with the provisions of the aforesaid Article 3, on the basis of the agreements already reached with the individual regions affected by each site or on the basis of the decrees *in lieu* of agreement.
9. Having obtained the agreement of the Unified Conference or the reasoned resolution referred to in paragraph 8, the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, adopts the decree of approval of the list of certified sites within thirty days. By means of the same decree, each certified and approved site is declared to be of national strategic interest and subject to special forms of oversight and protection; the right to carry out the activities referred to in Article 12 is awarded exclusively to the applicant operator. The decree is published in the *Official Gazette of the Italian Republic* as well as on the websites of the Ministry of Economic Development, the other Ministries involved and the Agency.
10. Without prejudice to the provisions of paragraph 7, within twelve months of publication referred to in paragraph 9, the region affected by the nuclear site proceeds to adapt its own Environmental Energy Plan in the light of the agreement or the decree of the President of the Republic referred to in paragraph 6.
11. For each certified site, the operator involved must submit an application referred to in Article 13 paragraph 1 within twenty-four months of the issue of the decree referred to in paragraph 9. In the absence of a motivated request for extension on the part of this operator, to be submitted before the expiry of the term, if this term elapses without an application being received, the certification for the individual site will lapse and the right to carry out the activities referred to in Article 12 will expire. In this event, the operator will be responsible for the costs incurred in certifying the site.
12. The term mentioned in paragraph 11 may be extended, via the procedure set out in the present article, on one occasion only and for a period not greater than 12 months.

Article 12

(Preliminary activities)

1. The certification of the approved site, pursuant to Article 11 and in relation to which the agreement of the region affected has been obtained or the decree *in lieu* of agreement has been issued, entitles the operator to carry out the following activities, in advance of the issue of the single licence:

- a) land surveying;
 - b) geological and geophysical surveying;
 - c) specific environmental investigations;
 - d) construction of service connections to the site;
 - e) enclosure of the perimeter.
2. The following activities must be notified or reported to the local authority concerned in accordance with the applicable legislation.
 3. Should the area in which the operator is authorised to carry out the work referred to in paragraph 1 not be available to said operator, the applicable provisions of Article 49 of the Decree of the President of the Republic No. 327 of 8 June 2001, the “Consolidated Act containing the legislative and regulatory provisions concerning compulsory purchase for public purposes” will have effect. The owner of the area is entitled to receive compulsory purchase compensation pursuant to Article 50 of the aforementioned decree of the President of the Republic. The associated costs are to be borne by the operator which benefits from the use of the site. Should the operator not construct the nuclear power plant for any reason, it must restore the site to a usable state and, if this is not possible, compensate the owner for the damage caused to their asset.

Article 13

(Single licence for the construction and operation of nuclear power plants and certification of the operator)

1. Within the timeframe established in Article 11 paragraph 11 which may be extended in accordance with paragraph 12 of the same article, the operator holding the rights to the certified site submits the relevant single licence application to the Ministry of Economic Development for construction and operation of the plant as well as storage of spent fuel and radioactive waste in facilities directly associated with the nuclear power plant and located on the same site, and in particular for the certification of the applicant; any resulting costs are provided for in the context of the economic and financial aspects of the work.
2. The application must contain the following data and information (otherwise it will be rejected). This content is analytically established by decree of the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, having consulted the Agency, to be issued within 90 days of the present decree coming into force concerning:
 - a) the full trading name of the applicant or consortium, with its organisational structure;
 - b) documentation demonstrating the availability of the technical capabilities referred to in Article 5;
 - c) documentation demonstrating the financial soundness of the operator and the existence of sufficient financial resources to cover the investments;

- d) documentation concerning land use planning and environmental and countryside protection;
- e) the final plan of the plant, to be compliant, in particular, with the environmental safety requirements pursuant to Legislative Decree No. 152 of 3 April 2006 as amended, to include, whilst not being limited to, the nature, characteristics and lifetime of the plant and associated installations, the operational procedures for storing spent fuel and radioactive waste and the related facilities on the site and connected to the nuclear power plant;
- f) the environmental impact study for the purposes of the EIA procedure;
- g) the final safety report;
- h) documentation of the plant operating model, and the following in particular:
 - I. quality assurance manual;
 - II. operating rules;
 - III. draft operating manual;
 - IV. cold functional testing programme;
 - V. test programme with the nuclear fuel loaded;
 - VI. a provisional organisational chart showing the technical personnel operating the plant and their supervisors and those in important positions in relation to nuclear safety or health protection and the associated certificates of compliance.
- i) a preliminary study of plant decommissioning, including an evaluation, based on the provisions of European directives, of the volume and the packaging, transport and delivery of the radioactive waste and spent nuclear fuel, with an indication of the anticipated costs involved;
- l) a list of the necessary public utility easements in relation to surrounding assets;
- m) suitable financial guarantees for the purposes envisaged by the applicable national and international legislation concerning third party liability arising from the peaceful uses of nuclear energy. The procedures for extending the guarantee to the activities referred to in Article 19 paragraph 2 of the present legislative decree are established by decree of the Minister for Economic Development in conjunction with the Minister for the Economy;
- m) suitable documentation of the existence of sufficient financial resources and insurance cover against the risk of failure to meet construction deadlines for reasons beyond the control of the licence holder, in accordance with the procedures established in the decree referred to in Article 15;
- n) documentation confirming compliance with the provisions of the Euratom Treaty;

- o) an up-to-date estimate of the amount of contributions due, pursuant to Article 23, in the form of compensation for the residents and businesses operating in the vicinity of the site and for the local authorities affected, including an indication of the dates by which these payments are planned to be made.
3. The application must be submitted at the same time to the Ministry of the Environment, Land and Sea, in particular for the purposes of initiating the environmental impact assessment (EIA) process, and also to the Ministry of Infrastructure and Transport.
4. The Ministry of Economic Development forwards the application to the Agency which carries out the technical assessment work, making use where necessary of the technical offices at the Ministry of the Environment, Land and Sea. The Agency reports its binding opinion within twelve months of the application and the associated documentation being received by the Ministry of Economic Development, for the purposes of ensuring the high levels of safety necessary to meet the requirements of protecting the health of the population and the environment.
5. As part of the assessment process, the Agency approaches the relevant authorities identified on the basis of the particular plan under assessment, for the opinions and permits falling within their competence, which must be provided within sixty days of request.
6. For the purposes of completing the assessment process, the Agency obtains the Environmental Impact Assessment (EIA) and the Integrated Environmental Authorisation (IEA), pursuant to Legislative Decree No. 152 of 3 April 2006 as amended, together with the reasoned opinion of the respective committees and acts in accordance with the findings.
7. For the purposes of the IEA, the EIA committee carries out the assessments pursuant to Legislative Decree No. 152 of 3 April 2006 as amended, in accordance with the procedures and strictly within the timescales established therein, whilst not duplicating the assessments which it has already made during the SEA. This is without prejudice to the Agency's assessment of the site location.
8. The Agency establishes the technical requirements to which the plant will be subject. These technical requirements constitute an integral and substantive part of the single licence. The Agency also stipulates any requirements concerning the certification of the applicant.
9. The Ministry of Economic Development, pursuant to the Euratom Treaty, notifies the European Union for the purposes of obtaining the views of the European Commission as required.
10. On completion of the assessment process, the Agency, taking into account the outcome of the EIA process, issues a binding opinion to the Ministry of Economic Development which, on that basis and within thirty days of notification of this opinion, convenes a services conference pursuant to Articles 14 *et seq.* of Law No. 241 of 7 August 1990, involving the Agency, the ministries concerned, the region and local authorities affected and all other involved parties and administrations, to be identified on the basis of the individual plan, which have not yet expressed their view or given their authorisation in the context of the assessment carried out by the Agency.
11. Should the necessary agreement not be reached with one of the local authorities involved during the services conference referred to in the previous paragraph, the President of the Council of Ministers, at the instigation of the Minister for Economic Development, allocates the authority

in question a suitable period of time in order to reach agreement. If agreement has not been reached by the end of this term, then following a resolution by the Council of Ministers attended by the President of the region affected, at the instigation of the Minister for Economic Development and in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, a decree of the President of the Council of Ministers is adopted *in lieu* of agreement.

12. Within thirty days of the successful conclusion of the assessment process, the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea, the Minister for Infrastructure and Transport, issues the single licence by decree; the licence is published in the *Official Gazette of the Italian Republic* and on the websites of the Agency and the ministries concerned. The aforementioned decree also has the effect of certifying that the licence holder meets the requirements.
13. The single licence indicates:
 - a) the identity of the licence holder;
 - b) the nature, characteristics and life time of the plant and associated installations;
 - c) the boundary of the installation;
 - d) its date of coming into force and duration, together with the renewal frequency;
 - e) the acceptance criteria ensuring the conformity of the plant and its infrastructure to the specified requirements;
 - f) the inspections, tests and analyses which the licence holder is required to carry out, together with the specification of the technical procedures for doing so;
 - g) the provisions of Legislative Decree No. 230 of 17 March 1995 as amended, in terms of nuclear safety and health protection;
 - h) the requirements and disclosure obligations, including the process and time frames, for ensuring the co-ordination and protection of the national electricity system and the safeguarding of the environment;
 - i) the provision of the financial guarantee for third party civil liability;
 - l) any other provision deemed necessary in order to protect the environment and public utility.
14. The single licence also constitutes a licence for operating nuclear power plants and nuclear fuel fabrication facilities, pursuant also to Article 6 of Law No. 1860 of 31 December 1962, subject to the acquisition by the operator of the necessary approval certificates relating to acceptance testing, non-nuclear and nuclear tests issued by the Agency.
15. The single licence constitutes a declaration of public utility, a statement that the works are urgent and cannot be postponed and, where appropriate, a declaration of non-transferability and the posting of the compulsory purchase order for the assets contained therein. The single licence represents a variation of the land-use planning process and replaces any administrative

measures, authorisations, concessions, licences, permits, deeds of consent and administrative deeds, regardless of their denomination, which may be required under the legislation in force, thereby conferring entitlement to construct and operate the plant in accordance with the approved plan.

Article 14

(Suspension and revocation of the single licence)

In the event of serious or repeated breaches of the obligations and the stated requirements, with particular regard to the commission of any of the offences specified by Article 33, the Minister for Economic Development may suspend or, in extreme cases, revoke the single licence.

Article 15

(Responsibilities of the licence holder in relation to safety and radiation protection controls)

1. Without prejudice to the provisions concerning safety and radiation protection controls, the licence holder is also responsible for:
 - a) plant safety;
 - b) training the workers at the plant, with particular regard to the prevention of risks associated with the process of constructing and operating the plant;
 - c) compliance with the Agency's requirements in relation to safety and, in particular, to the construction and operation of the plants;
 - d) providing wide-ranging and detailed information to the general public involved, in appropriate formats, with the aim of creating suitable conditions for the implementation and management of the nuclear power plant to which the licence pertains.
2. The costs relating to the safety and radiation protection inspections carried out by the Agency, which must in any case ensure maximum transparency in dealings with citizens and local administrative bodies, and must be carried out within specific time frames that are compatible with the complex planning of the activities, are to be borne by the licence holder.
3. The licence holder, under the supervision of the Agency, is responsible for regularly assessing and verifying and continuously improving the nuclear safety of the plant in a systematic and verifiable manner, ensuring the establishment and implementation of management systems which afford due priority to nuclear safety, and measures for preventing accidents and mitigating their consequences, including suitable physical barriers and administrative protection procedures whose failure would significantly expose workers and the general public to ionizing radiation, whilst providing and maintaining financial and human resources for fulfilling the above commitments.

Article 16

(Licence holder's annual report)

1. The licence holder is required to notify the Agency promptly of any significant incidents and events regarding nuclear safety and radiation protection occurring on the site, together with the measures put in place to restore correct operation and limit the impact on human health and the environment.
2. The licence holder will send the Agency a report by the end of each calendar year concerning the construction/operation of the nuclear power plant, containing the following information:
 - a) the progress status of the construction works, the causes of any delays and the updated planned completion timescales;
 - b) procedures adopted for the correct fulfilment of all the requirements imposed by the single licence, including those relating to the construction phases and, where applicable, the test period prior to the plant entering service;
 - c) measures adopted in order to ensure nuclear safety and protection from ionizing radiation;
 - d) nature and results of the monitoring of radioactive and other emissions from the nuclear power plant into the environment;
 - e) nature and quantity of radioactive waste present on the nuclear power plant site, together with the measures adopted for limiting its production and its impact on health and the environment.
3. The report is also sent to the Public Assessment and Transparency Committee described in Article 22 and is published on the websites of the licence holder and the Agency.

Article 17

(Financial resources and insurance cover)

Within 60 days of the entry into force of the present decree, by decree of the Minister for Economic Development in conjunction with the Minister for the Economy and Finance, financial resources and insurance cover are established to guard against the risk of delays in constructing and commissioning the plants for reasons beyond the licence holder's control, with the exclusion of risks arising from the contractual relationships with the suppliers, which are to be borne by the licence holder.

Article 18

(Surveillance and administrative suspension of the plants)

1. The Agency is responsible for verifying that the licence holder properly complies with all the requirements stipulated in the licence.
2. Without prejudice to the provisions concerning breaches of the legal and licence requirements, if, during the exercise of its monitoring role in relation to the construction and operation of the plant and the safety measures, the Agency should bring to light situations of undue risk, it will

issue technical instructions and corrective measures designed to eliminate the problem, which are to be implemented within a timeframe of its choosing.

3. The licence holder will adopt without delay safety measures which have been indicated by the Agency as being of immediate urgency. The licence holder will also have thirty days from the issue of the instructions referred to in paragraph 2 to submit technical solutions and suitable practical measures for the Agency's approval with the aim of ensuring further improvements.
4. Within the subsequent fifteen-day period, the Agency will confirm the instructions as issued or will produce a new and final version of them, establishing the fixed term within which the licence holder must comply with the instructions and the measures specified. In the event of failure to comply with the above within the specified timeframe, the Agency may suspend the activities for which the single licence had been issued.
5. The measures adopted by the Agency are made public on its official website and on that of the Ministry of Economic Development.

Article 19

(Provisions concerning the disposal of radioactive waste)

1. The licence holder is responsible for the management of operational radioactive waste and nuclear fuel throughout the life cycle of the plant. For this purpose, operational radioactive waste is taken to mean those produced during the operation of the nuclear power plant which is managed by the operator in line with the current regulations together with the technical and operational instructions issued by the Agency, which may be stored temporarily on the plant site prior to transfer to the national waste repository.
2. The licence holder is responsible, in accordance with the applicable legislation and in particular the provisions of Chapter VII of Legislative Decree No. 230 of 17 March 1995 and the operational instructions issued by the Agency, for the treatment and conditioning of the operational waste, its disposal to the national waste repository and the storage of the spent fuel at said national waste repository.
3. The costs of the operations described in paragraph 2 are to be borne by the licence holder.

Article 20

(Plant decommissioning provisions)

1. The plant decommissioning work will be the responsibility of Sogin S.p.A. in accordance with its company's objects, the strategic guidelines of the Minister for Economic Development and the Minister for the Economy and Finance pursuant to Article 27 paragraph 8 of Law No. 99 of 23 July 2009, together with the relevant applicable provisions.
2. At the end of a plant's life cycle, Sogin S.p.A. takes charge of the safety management of the plant and carries out all the work concerning the decommissioning of the plant up to the release of the site for other uses.
3. At the end of the plant's life cycle, Sogin S.p.A. estimates the decommissioning costs jointly with the operator, seeking confirmation from a competent third party if necessary.

4. The decommissioning work is to be financed through the fund described in Article 21, containing the payments made by the licence holder.
5. If, at the end of the useful life of each plant, the associated decommissioning costs as assessed by Sogin S.p.A. exceed the amount deposited by the licence holder, the latter will be required to credit the fund with the difference.
6. Sogin S.p.a. is subject to the provisions of Articles 15, 18 and 22, insofar as they are applicable.

Article 21

(Decommissioning fund)

1. The decommissioning fund pursuant to Article 25 paragraph 2(n) of Law No. 99 of 23 July 2009, is held at the State Equalisation Fund for the Electricity Industry and is maintained by the licence holders which make a payment for each year of plant operation. The fund is divided into sections – one for each nuclear power plant – to which the payments made by the individual licence holders from the end of the first year of operation of the associated plants are allocated. The State Equalisation Fund manages the fund and may make interest-bearing investments with a risk profile no more adverse than that of Government bonds, provided that the necessary liquidity of the fund is not jeopardised.
2. The extent of the regular payment described in paragraph 11 is determined by the AEEG (the Italian Electricity and Gas Authority) on the basis of a recommendation from Sogin S.p.a. and with advice from the Agency, taking similar experience with the same technology elsewhere in the world as a yardstick and in any case using efficiency criteria and taking into account the estimate for the decommissioning of plants as submitted by the operators during the authorisation phase. The amount is reviewed each year in accordance with the indices established by the AEEG and a new assessment is made every five years.
3. The financial resources assigned to the fund are checked and verified annually by AEEG which, through the State Equalisation Fund referred to in paragraph 1, arranges for the funds to be paid on the basis of the progress of the relevant works, subject to checks and inspections of the plans and costs of decommissioning the nuclear power plants, together with the conditioning, transport and delivery of the radioactive waste, as submitted by the operators, in accordance with current legislation.

Article 22

(Public assessment and transparency committees)

1. A “Public Assessment and Transparency Committee” is established, without the need for new or additional public funding, for each region whose territory contains a certified site (as defined in Article 8 paragraph 4), and also in the region containing the site selected as the location for the national waste repository. Its remit is to ensure public information, monitoring and public assessment of the activities concerning the authorisation process, the construction, operation and decommissioning of the nuclear power plant involved and the measures adopted to protect the health of the workers and the local population and to safeguard the environment.
2. For these purposes, the holder of the rights to the site is required to respond to the requests of the Public Assessment and Transparency Committee, to provide it with all the information and

data sought, except for information of a sensitive commercial nature and that which concerns the physical safety measures in place at the nuclear power plant.

3. Any person interested in obtaining information about the plans and activities of the nuclear power plant and the measures adopted in terms of nuclear safety, radiation protection and the prevention or reduction of risks and exposures may contact the Public Assessment and Transparency Committee which is required to provide the information in its possession or which has been acquired from the licence holder for the purpose.
4. The Public Assessment and Transparency Committee which is established by decree of the Minister for Economic Development in conjunction with the Ministry of the Environment, Land and Sea, the Minister for Infrastructure and Transport and whose costs are to be borne by the operator has the following members:
 - a) the President of the Region affected, or designed deputy, who chairs the Committee;
 - b) the President of the Province affected, or designed deputy;
 - c) the Mayor of the municipality(ies) in whose territory the plant is located, together with the mayors of the adjacent municipalities, as established in Article 23 paragraph 4;
 - d) the Prefect or a designated deputy;
 - e) a representative of the Ministry of Economic Development;
 - f) a representative of the Ministry of the Environment, Land and Sea;
 - g) a representative of the Ministry of Education, Research and the Universities;
 - h) a representative of ISPRA;
 - i) a representative of the Ministry of Infrastructure and Transport;
 - l) a representative of the ARPA (Regional Environmental Protection Agency) of the region affected;
 - m) a representative of the Agency;
 - n) a representative of the holder of the rights to the site and, following issue of the single licence, the licence holder;
 - o) a delegate of the most representative environmental association at regional level;
 - p) a delegate of the local business community from the most representative trade association at regional level;
 - q) a delegate of the most representative trade union at regional level;
 - r) a qualified radiation protection expert appointed by the Agency.
5. The members of the Committee serve for five-year terms, except those who are serving in an elected capacity, who remain in post for the entire duration of their elected term. The Public

Assessment and Transparency Committee meets ordinarily at least once a year at the behest of the Chairman or whenever the latter deems it necessary or opportune. Its members serve the Committee without emoluments or remuneration.

6. The Public Assessment and Transparency Committee may request reports in relation to certain technical, radiation protection and environmental issues from qualified public bodies, such as the universities, public research authorities, ISPRA or the ARPAs, the costs of which are deducted by the operator from the annual fees referred to in Articles 23 and 30.

Article 23

(Direct economic benefits for residents, local authorities and businesses operating in the locality)

1. The issue of the single licence must be accompanied by a commitment on the part of the operator to ensure that residents and businesses operating in the vicinity of the nuclear power plant site, as well as the local authorities affected, are afforded economic benefits; these benefits are to be provided exclusively by the businesses involved in the construction or operation of the plants and infrastructure which is the subject of the single licence.
2. The holder of the single licence for plants generating nuclear power, jointly and severally with the other parties bound referred to in paragraph 1, grants the beneficiaries referred to in paragraph 4:
 - a) an all-inclusive financial benefit as from the start of the plant construction works, to be paid for each calendar year, or part thereof, of the construction plan for the nuclear power plant as approved by the single licence. The unit rate on which the aforementioned benefit is based depends on the nominal electrical power rating of the plant under construction, namely EUR 3 000/MW up to 1 600 MW, with a 20% premium for any installed power in excess of this level;
 - b) an all-inclusive financial benefit due as from the plant's entry into service, to be paid on a quarterly basis in arrears for each quarter, or part thereof, in which the nuclear power plant is in operation, in proportion with the electricity which is generated and supplied to the network, to the value of EUR 0.4/MWh.
3. The holder of the single licence in relation to nuclear fuel fabrication facilities grants, jointly and severally with the other parties bound referred to in paragraph 1, a financial benefit to the beneficiaries referred to in paragraph 4, to be paid on an annual basis in arrears for each year, or part thereof, in which the plant is in operation, calculated on the basis of criteria established by subsequent decree of the Minister for Economic Development in conjunction with the Minister for the Economy and Finance.
4. The financial benefits mentioned in paragraphs 2(a) and 3 are apportioned on a geographical basis, namely 10% to the province(s) in whose territory the plant is located, 55% to the municipality(ies) where the plant is located and 35% to adjoining municipalities, i.e. those whose territory falls wholly or partly within 20 km of the boundary of a power plant or 10 km of that of a nuclear fuel production facility. The payment due in the latter case is calculated in proportion to the area and the population resident within the specified distances, taking account, in particular, of territorial equalisation factors.

5. The template for the agreements to be stipulated between the licence holder and the local authorities identified in paragraph 4 is specified by decree of the Minister for Economic Development in conjunction with the Minister for the Economy and Finance and in light of the view of the Unified Conference, along with the criteria and process for paying the benefit as mentioned in paragraph 2(a), apportioned as follows:
 - a) 40% in favour of the local authorities;
 - b) 60% in favour of the residents and local businesses operating in the vicinity of the nuclear site, through a reduction in energy costs, the TARSU (refuse collection charge) and the additional IRPEF (individual income tax), IRES (corporation tax) and ICI (local property tax) levies.
6. In the context of the financial benefits referred to in paragraph 5(a), the agreements referred to in the same paragraph may entail one or more structural interventions in terms of the health of the population, the environment and cultural heritage, and may also establish the procedures for awarding these works to the local authorities.
7. The benefits referred to in paragraphs 2(b) and 3 are provided to reduce the costs of electricity provision in favour of end customers in the territories of the local authorities referred to in paragraph 4, in accordance with the criteria and procedures established by decree of the Minister for Economic Development, in conjunction with the Minister for the Economy and Finance, at the behest of the Electricity and Gas Authority and in the light of the views expressed by the local authorities affected.
8. The benefits mentioned in paragraph 2 are revised on an annual basis by decree of the Minister for Economic Development on the basis of the national domestic and business consumer price trends.
9. The parties responsible for bearing the costs are prohibited from passing on the costs of the benefits described in the present article to the end users. The Electricity and Gas Authority monitors to ensure compliance with this prohibition.

Article 24

(Expiry of benefits)

In the event that the construction or operation of the plant ceases permanently, for whatever reason, the benefits granted to the residents, local authorities and businesses will automatically cease to apply with effect as from the cessation date; any benefits paid in advance will not be claimed back.

TITLE III

Procedures for the siting, construction and operation of the national waste repository for the permanent disposal of radioactive waste, the technology park and the associated compensatory measures

Article 25

(National waste repository and technology park)

1. The provisions of this Title govern the siting, construction and operation of the national waste repository referred to in Article 2(i), in the context of the technology park discussed in the present article, without prejudice to the other current relevant legislative and technical provisions.
2. The technology park is equipped with shared facilities for the services and functions necessary in order to manage an integrated system of operational work, scientific research and technology development. It has the technological infrastructure for carrying out the work associated with the management of radioactive waste and spent fuel, including its characterisation, treatment, packaging and storage, together with the pursuit of all research, educational and technology development activities associated with the management of radioactive waste and radiation protection, in accordance with the procedures established by decree of the Minister for Economic Development in conjunction with the Minister for the Environment, Land and Sea and the Minister for Education, the Universities and Research.
3. Sogin S.p.A. develops the technology park and, in particular, the national waste repository and its supporting technological infrastructure, using funds provided by the financing of the activities for which it is responsible. On the basis of agreements between the Government, the region, the local authorities affected, together with other bodies and private parties, other/additional sources of finance may be established for the development of the study and experimental research centre.

Article 26

(Sogin S.p.A.)

1. Sogin S.p.A., in accordance with the measure in Article 27 paragraph 8 of Law No. 99 of 23 July 2009, is the organisation responsible for decommissioning plants at the end of their useful life, maintaining them in a safe condition, and constructing and operating the national waste repository and the technology park referred to in Article 24, including the treatment and disposal of radioactive waste.

To that end it:

- a) manages the work involved in finding a site for the technology park, in line with Article 25;
- b) is responsible for the work related to the authorisation process for constructing and operating the technology park and the treatment and disposal of radioactive waste;
- c) is responsible for the implementation and operation of the technology park;

- d) collects the payment for the activities described in Article 27 from the operators involved in the treatment and disposal of radioactive waste, in line with processes and tariffs established by decree of the Ministry of Economic Development in conjunction with the Ministry of the Economy and Finance, and pays the local authorities the monies to which they are entitled, calculated pursuant to Article 29 of the present legislative decree;
 - e) provides wide-ranging and detailed public information and communication campaigns in relation to the activities which it carries out, with the aim of creating suitable conditions for the implementation and management of the plants.
2. The work mentioned in paragraphs 1(c) and 1(e) is subject to monitoring and control by the Agency and, in relation to that in paragraph 1(d) only, also to the monitoring and control of the Electricity and Gas Authority pursuant to Law No. 481 of 14 November 1995.

Article 27

(Single licence for the construction and operation of the technology park)

1. Within six months of the entry into force of the present legislative decree, Sogin S.p.A., taking into account the criteria identified by the IAEA and the Agency and on the basis of the outcomes of the strategic environmental assessment procedure referred to in Article 9, proposes a national map of potentially suitable areas for siting the technology park, ranking the aforementioned areas in a suggested order of suitability on the basis of technical and socio-environmental characteristics of the areas initially identified, together with a draft outline plan for development of the technology park.
2. The contents of the draft outline plan and the documentation accompanying it are as indicated below:
 - a) documentation concerning the type of radioactive materials to be stored in the national waste repository (acceptability criteria for storage; acceptable methods of packaging; radiological inventory etc.);
 - b) a preliminary indication of the total capacity of the national waste repository which may be based on a modular construction;
 - c) identification of the safety criteria underlying the repository design;
 - d) an indication of the relevant infrastructure facilities of the national waste repository;
 - e) criteria for devising the survey plan, and the content thereof, for establishing the suitability of the site;
 - f) an indication of the required staffing for the national waste repository at the various stages in its life, including plans for the recruitment of personnel from the local resident population in line with the professional skills required, together with plans for specific training courses;
 - g) an indication of the means of transporting the radioactive material to the national waste repository and the criteria for evaluating the suitability of access roads to the site;
 - h) an outline indication of the facilities to be provided at the technology park and the potential benefits for the local area, including in employment terms;

- i) a quantitative estimate of the benefits for local residents, businesses operating in the locality around the site and the local authorities affected, with the plans and timeframes for making them available.
3. The proposed national map of potentially suitable areas, together with the order of suitability of the areas identified on the basis of their technical and socio-environmental characteristics, the draft outline plan and the documentation specified in the previous paragraphs are published in a timely fashion on the website of Sogin S.p.A., which at the same time will advertise the fact in at least five national daily newspapers. The regions, local authorities and qualified stakeholders then have sixty days from the date of publication to formulate comments and technical proposals, which should be submitted to Sogin S.p.A. in writing (and not anonymously) via a duly specified e-mail address. The notifications on the websites and in the daily newspapers will indicate the offices where the documents can be consulted in full, together with the process, the timescales, the form and the guidance for formulating comments or proposals. This public consultation is carried out in compliance with the principles and measures contained in Law No. 241 of 7 August 1990.
4. Within 60 days of publication referred to in paragraph 3, Sogin S.p.A. organises a national Symposium, whose invited attendance is to include the ministries involved and the Agency, the regions, the provinces and municipalities whose territories contain the areas affected by the proposed national map of the potentially suitable areas, referred to in paragraph 1, together with UPI (the Union of Italian Provinces), ANCI (the National Association of Italian Municipalities), the Industrial associations of the provinces affected, the most representative trade unions in the area, the universities and the research bodies in the areas involved. The Symposium involves detailed discussion of all the technical issues concerning the technology park, with particular regard to the full and accurate compliance of the areas identified with the requirements of the IAEA and the Agency and the issues relating to the safety of the workers, the local population and the environment, together with illustrations of the potential economic and territorial development benefits associated with the development of these facilities and the compensation measures referred to in Article 30 paragraph 2.
5. On the basis of the comments which have been made following the publication of the documentation and the symposium, referred to in the previous paragraphs, and formally submitted to Sogin S.p.A. within 30 days of this Symposium, Sogin S.p.A. will produce an updated version of the proposed national map of the potentially suitable areas, ranked in line with the criteria established above, within a further sixty days, and send it to the Ministry of Economic Development.
6. The Minister for Economic Development issues a decree, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, and in light of the technical opinion of the Agency, which is to be provided within sixty days, to approve the national map of potentially suitable sites for the technology park. The map is published on the websites of Sogin S.p.A., the aforementioned ministries and the Agency.
7. Within thirty days of approval of the map, Sogin S.p.A. invites the regions and local authorities from the areas which are potentially suitable for siting the technology park to make known their interest in having it in their area, and instigates bilateral negotiations for the purpose of agreeing a site, to be formalised with a specific protocol of agreement. The expression of interest on its own does not constitute a commitment of any kind on the part of the regions or local authorities. In the absence of expressions of interest, Sogin S.p.A. pursues bilateral negotiations with all the regions involved. Should there be several protocols, each of these establishes the level of

priority of the area on the basis of its technical, economic, environmental and social characteristics, as specified by Sogin S.p.A. in terms of the criteria set by the International Atomic Energy Agency (IAEA) and by the Agency. At the conclusion of the process, the Ministry of Economic Development obtains the agreement of the regions involved.

8. Should the agreement referred to in paragraph 7 not be reached within sixty days of the request for it being received, an Inter-institutional Committee to pursue this agreement is established within the following thirty days, whose members are appointed so as to ensure equal representation, respectively, of the Ministry of Economic Development, the Ministry of the Environment, Land and Sea and the Ministry of the Infrastructure and Transport, on the one hand, and the region on the other. The Inter-institutional Committee's method of operation is established within the above timeframe by decree of the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, with the prior opinion of the Unified Conference which is to be provided within thirty days of request; the members of the Committee are not paid for their services. Should it not be possible to establish the aforementioned Inter-institutional Committee, or should agreement still not be reached within the subsequent sixty days, the agreement is made by decree of the President of the Republic, after discussion with the Council of Ministers with the participation of the President of the Region affected.
9. On completion of the procedure described in paragraphs 7 and 8, the Minister for Economic Development notifies the Unified Conference of the proposed potentially suitable areas, in relation to which the regional agreement has been reached, pursuant to Article 8 of Legislative Decree No. 281 of 28 August 1997, which sets out the agreement reached within the timeframes established in Article 3 of said legislative decree and, in any case, not later than ninety days from receipt of the associated request. If no agreement is reached, the Council of Ministers makes a reasoned resolution, in accordance with the provisions of the aforementioned Article 3, on the basis of the agreements already reached with the individual regions affected by each site.
10. Within 270 days of the protocol referred to in paragraph 7, Sogin S.p.A. will carry out the technical surveys, following the procedures established by the Agency, for each area which is subject to the agreement in the order of suitability referred to in the aforementioned paragraph in order to establish which one will be used as the site for the technology park. The provisions of Article 12 will apply. The Agency monitors the progress of the technical surveys, examines the final results and expresses a binding opinion to the Ministry of Economic Development as to the suitability of the proposed site. Once the technical surveys have been completed, Sogin S.p.A. will formulate a site proposal and submit it to the Ministry of Economic Development.
11. Within thirty days of receiving the proposal, the Minister for Economic Development, in conjunction with the Minister for Infrastructure and Transport, and the Minister for the Environment, Land and Sea, having consulted the Minister for Education, the Universities and Research in terms of matters concerning research, on the basis of the proposal devised by Sogin S.p.A. and the binding opinion of the Agency, determines the site for the technology park by decree and confers the right to carry out the activities mentioned in the present Article exclusively to Sogin S.p.A. By the same decree, the area involved is declared to be of national strategic interest and becomes subject to special forms of monitoring and protection, and the relevant compensation measures are established. The decree is published in the *Official Gazette of the Italian Republic*, as well as on the websites of the aforementioned Ministries, Sogin S.p.A. and the Agency.
12. Within thirty days, Sogin S.p.A. will initiate a wide-ranging and detailed information and communication campaign in the region containing the pre-selected site for the technology park,

for the purposes of providing the necessary information about the national waste repository to the local population and authorities. This campaign will give particular consideration to safety, environmental protection and the socio-economic, cultural and territorial development impact of the development of the technology park, together with the planned compensation measures, including the extent of the compensation and the procedures and timescales for making it available to the population affected.

13. Within four months of publication of the decree referred to in paragraph 11, Sogin S.p.A. will apply, following the procedures set out in Article 28, to the Ministry of Economic Development for the single licence to construct and operate the national waste repository and to implement all the other related facilities which comprise the technology park. The assessment of this application is then carried out by the Agency within at most one year from the submission of the application.
14. On completion of the assessment work, the Agency, taking into account the outcome of the EIA process, issues a binding opinion to the Ministry of Economic Development which, on that basis, within thirty days of notification of this opinion, calls a meeting of the services conference pursuant to Articles 14 *et seq.* of Law No. 241 of 7 August 1990, involving the relevant ministries, the region and local authorities affected and all other involved parties and administrations, to be identified on the basis of the individual plan, which have not yet expressed their view or given their authorisation in the context of the assessment analysis carried out by the Agency.
15. Should the necessary agreement not be reached with one of the local authorities involved during the services conference referred to in paragraph 14, the President of the Council of Ministers, at the instigation of the Minister for Economic Development, allocates the authority in question a suitable period of time in order to reach agreement. If no agreement has been reached by the end of this term, then following a resolution by the Council of Ministers attended by the President of the region affected, a decree of the President of the Council of Ministers (at the instigation of the Minister for Economic Development and in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport) is adopted *in lieu* of agreement.
16. Within thirty days of successful conclusion of the assessment process, the Minister for Economic Development, in conjunction with the Minister for the Environment, Land and Sea and the Minister for Infrastructure and Transport, issues the single licence by decree; the licence is published in the *Official Gazette of the Italian Republic* and on the websites of the Agency and the Ministries concerned.
17. The single licence establishes:
 - a) the characteristics of the national waste repository and the other related facilities comprising the technology park;
 - b) the boundary of the installation;
 - c) the inspections, tests and analyses which Sogin S.p.A. is required to carry out following issue of the single licence;
 - d) the acceptance criteria to ensure that the technology park, the associated facilities and related installations are constructed and operated in conformance with the documentation

accompanying the licence application referred to in Article 28, additionally including specifications of the technical procedures for carrying out the inspections, tests and analyses;

- e) the information requirements and commitments with which Sogin S.p.A. is required to comply in order to ensure the necessary protection and safeguards for the public and the environment, together with the time frame within which the works must be completed.

Article 28

(Application for the single licence and the associated assessment)

1. The application for the single licence to construct and operate the technology park and the associated facilities must contain the following documentation:
 - a) a final plan of the technology park;
 - b) the environmental impact study for the purposes of the EIA procedure;
 - c) the final safety report;
 - d) documentation comprising the national waste repository operating model, and in particular:
 - the operating rules;
 - the operating manual;
 - the general testing programme for the handling and storage of radioactive waste;
 - the organisational chart showing the personnel operating the facility and their supervisors, and those in important positions in relation to nuclear safety or health protection and the associated certificates of compliance;
 - e) a list of the easements to be established for third party real assets for the construction and operation of the plants and associated activities;
 - f) an appropriate financial guarantee pursuant to Article 22 of Law No. 1860 of 31 December 1962; documentation confirming compliance with the provisions of the Euratom Treaty.
2. During the course of the assessment process, the Agency:
 - a) evaluates the documentation accompanying the application, with a particular view to establishing the technical requirements to which the national waste repository will be subject;
 - b) requests the opinions from the competent authorities, which must be provided within 60 days of the request to do so;
 - c) notes the outcome of the Environmental Impact Assessment (EIA) carried out in line with the applicable regulations;

- d) notifies the European Union, as required by the Euratom Treaty, in order to elicit the view of the European Commission.
3. Once the assessment process is complete, the Agency reports its binding opinion to the Minister for Economic Development for the purposes of the issue of the single licence pursuant to Article 26.

Article 29

(Payment for depositing radioactive waste and spent nuclear fuel)

The tariffs for payment for delivering radioactive waste and spent nuclear fuel from nuclear power plants to the national waste repository are set on an annual basis by the Electricity and Gas Authority pursuant to Law No. 481 of 14 November 1995, in accordance with criteria which are reviewed every four years, on the basis of the estimate provided by Sogin S.p.A. of the costs of storing the waste safely, taking in account any additional services required such as characterisation, conditioning and repackaging, together with the compensatory measures discussed under Article 30.

Article 30

(Compensatory measures)

1. In order to optimise the socio-economic, employment and cultural impact of the development of the technology park, the locality surrounding the site is entitled to a financial benefit in relation to the radioactive waste deriving from the activities governed by Title II of this legislative decree and another in relation to the radioactive waste deriving from the activities governed by previous legislation.
2. As regards the radioactive waste deriving from the activities governed by Title II of this legislative decree, the payment referred to in paragraph 1 is to be made by Sogin S.p.A. in accordance with criteria established by decree of the Minister for Economic Development in conjunction with the Minister for the Environment, Land and Sea and the Minister for the Economy and Finance, taking account of the overall volume and radioactive content. This benefit is apportioned in accordance with the provisions of Article 23 paragraph 4.
3. The provision in paragraph 2 is not applicable to radioactive waste resulting from activities which had already ceased at the date of entry into force of the present decree, for which the provisions of Article 4 of Decree Law No. 314 of 14 November 2003, as converted with amendments, by Law No. 368 of 24 December 2003, as amended by Article 7-ter of Decree Law No. 208 of 30 December 2008, as converted with amendments, by Law No. 13 of 27 February 2009, will continue to apply.
4. The procedure for transferring the monies to the local authorities involved is governed by a specific agreement to be stipulated with Sogin S.p.A.
5. The local authorities receiving the benefits referred to in the previous paragraph are required to pay a percentage of them, in accordance with transparent criteria and procedures established in advance, to the residents and businesses operating in the locality within 20 km of the site, by means of a corresponding reduction in the municipal refuse charge or similar measures.

TITLE IV

Information Campaign

Article 31

(Information campaign)

1. The Ministry of Economic Development, in consultation with the Ministry of the Environment, Land and Sea and the Ministry of Infrastructure and Transport, puts forward a programme for establishing and implementing a “national information campaign on energy production from nuclear sources”. This process involves, subject to the budgetary resources allocated for the purpose and by means of a suitable agreement, the national Agency for inward investment promotion and enterprise development (Agenzia per l’attrazione degli investimenti e lo sviluppo d’impresa S.p.A.) and envisages the involvement, under the auspices of this agreement, of a representative of the Electricity and Gas Authority (AEEG), the Department for information and public relations of the Office of the President of the Council of Ministers, the National Nuclear Safety Agency, ISPRA, the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the institutions, territory and environment office of the National Association of Italian Municipalities (ANCI) and the designated specialist referred to in paragraph 2.
2. The programme referred to in paragraph 1 requires the approval by decree of the Minister for Economic Development, in conjunction with the Ministry of the Environment, Land and Sea, the Ministry of Infrastructure and Transport and the Ministry of the Economy and Finance within three months of this legislative decree coming into force, subject to receipt of the opinion of the Department for information and public relations of the Office of the President of the Council of Ministers. The programme sets out the objective, the budgetary requirements, the usable resources, the information content, the target audience and the parties involved in implementing the information campaign. The associated dissemination strategy together with the processes, means and tools deemed most suitable for maximising the effectiveness of the exercise, are established by a designated domain specialist appointed under the auspices of the agreement referred to in paragraph 1, who also has the responsibility for devising, planning and implementing the campaign itself.
3. The information campaign referred to in paragraph 1 is conducted through the use of the best and most modern means of mass communication available and with the support of the national technical, scientific and industrial infrastructure. This includes the development of a suitable internet portal as a reference source and for detailed information, with features for interacting with the users.
4. The information campaign referred to in paragraph 1 is launched within 90 days of the approval referred to in paragraph 2.

Article 32

(Implementation)

Given the particular requirements and the level of urgency, the information campaign is implemented via a procedure negotiated pursuant to Article 57 of Legislative Decree No. 163 of 12 April 2006.

TITLE V

Final Provisions

Article 33

(Criminal sanctions)

1. The construction or operation of a nuclear power plant or a nuclear fuel fabrication facility without having obtained the single licence referred to in Article 13, or after said licence has been suspended or revoked, is punishable by two to three years' imprisonment and a fine of five hundred thousand to EUR 5 million. This measure is not applicable to licences issued pursuant to Article 13 paragraph 14 for plants for the treatment and use of minerals, raw materials, special fissile materials, enriched uranium and radioactive materials, which continue to be governed by Article 30 of Law No. 1860 of 31 December 1962.
2. Failure to comply with the instructions issued by the Agency in relation to the single licence referred to in Article 13, except from those specified under paragraph 13(f), is punishable with the penalties specified in paragraph 1, reduced by a half.
3. Licence holders failing to comply with the instructions concerning the treatment, packaging and disposal of the operational waste referred to in Article 18 paragraph 2 are punishable by six months' to two years' imprisonment and a fine of EUR 50 000 to 500 000; this same penalty is applicable to producers or holders of radioactive waste generated by industrial and medical activities which fail to comply with the instructions referred to in Article 18 paragraph 4.

Article 34

(Administrative sanctions)

1. Licence holders which fail to submit the report referred to in Article 15 paragraph 1 or submit it in an incomplete state, are subject to the imposition of an administrative fine of EUR 100 000 to 1 000 000.
2. Licence holders which fail to carry out the inspections, tests and analyses referred to in Article 13(f), or which do not carry them out in accordance with the established procedures, are subject to the imposition of an administrative fine of EUR 500 000 to 50 000 000.
3. Parties which are required to pay the compensation benefits referred to in Article 23 but which fail to comply with the obligations to pay these benefits within the time frames prescribed under the agreements referred to in paragraph 5 of the aforementioned article and by decree of the Minister for Economic Development referred to in paragraph 7 of the same article, are subject to the imposition of an administrative fine of EUR 300 000 to 10 million.
4. Within the upper and lower limits established by paragraphs 1 and 2, the determination of the magnitude of the administrative fines takes into account not only the criteria pursuant to Article 11 of Law No. 689 of 24 November 1981 but also the varying potential for harm to the protected interest which each infringement theoretically represents, the specific personal qualities of the infringer, including those which entail particular duties of prevention, control or monitoring, in addition to the gain which the infringement may bring to the infringer or to the person or body in whose interests they act.

5. The reduced payment regime pursuant to Article 16 of Law No. 689 of 24 November 1981 is not applicable to the administrative fines provided for under the present article.
6. In relation to the establishment of administrative offences, the imposition of the administrative fines is the responsibility of the Agency, by means of enforcement orders pursuant to Articles 18 *et seq.* of Law No. 689 of 24 November 1981.
7. In more serious cases, the administrative fines referred to in the previous paragraphs may be supplemented by the application of the additional sanction of the suspension of the activity for a period from one to six months, or indeed the revocation of the licence.
8. Appeals against the administrative sanctions imposed under the present article are subject to the sole jurisdiction of the administrative court and are made before the administrative court in the region in which the Agency is based.

Article 35

(Repeals)

1. The following legal provisions are hereby repealed:
 - a) Article 10 of Law No. 1860 of 31 December 1962;
 - b) Articles 1, 2, 3, 4, 5, 6, 7, 20, 22 and 23 of Law No. 393 of 2 August 1975.
2. The provisions of Law No. 1860 of 31 December 1962 are applicable insofar as they are compatible with the present decree.

The present decree, bearing the state stamp, will be added to the Official Gazette of the Republic of Italy. Those to whom this decree is addressed shall comply therewith and ensure that it is complied with.

Rome,

International Regulatory Activities

European Atomic Energy Community

Entry into force of the Lisbon Treaty (2009)

The Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (“Lisbon Treaty”) of 13 December 2007 entered into force on 1 December 2009. It amends the Treaty on European Union (TEU) and replaces the Treaty establishing the European Community (EC Treaty) by the new Treaty on the Functioning of the European Union (TFEU).

The Treaty establishing the European Atomic Energy Community (Euratom Treaty) will remain largely unchanged. It will continue to be a separate legal framework, *lex specialis*, remaining as a separate Community next to the European Union (see Protocol No 2 of the Lisbon Treaty).

The enhanced role of the European Parliament in ordinary legislative procedure [Article 289 (1) of the TFEU] does not apply to most subjects under the Euratom Treaty; thus, the European Parliament will continue to have mainly consultation rights while the Council of Ministers remains the principal legislator. This is, for example, the case for health and safety legislation under Articles 31 and 32 of the Euratom Treaty.

Various institutional changes will, however, apply to the domain of the Euratom Treaty, such as the creation of a High Representative of the Union for Foreign Affairs and Security Policy (Article 18 of the EU Treaty) and a President of the European Council for 2½ years [Article 15(5) of the EU Treaty]. Other institutional changes (Art. 106a Euratom Treaty) relate, for example, to the European Court of Justice which was renamed the Court of Justice of the European Union (Article 19 of the EU Treaty) and to general financial, staff, language and transparency matters that are brought into line with the TEU and TFEU.

Amendment to Council Regulation on the conditions governing imports of agricultural products originating in third countries following the accident at the Chernobyl nuclear power station (2009)

Council Regulation (EC) No. 1048/2009 of 23 October 2009 amends Regulation (EC) No. 733/2008 on the conditions governing imports of agricultural products originating in third countries following the accident at the Chernobyl nuclear power station.¹ The amendment aims to extend for ten years the existing system for checking compliance with the maximum permitted levels of radioactivity in agricultural products, taking into account that the radioactive caesium contamination of certain products originating in the third countries most affected by the Chernobyl accident still exceeds these levels.

1. OJ L 290, 6 November 2009, p. 4-4.

International Atomic Energy Agency

Open-ended Meeting of Technical and Legal Experts for Sharing of Information on States' Implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and its Supplementary Guidance on the Import and Export of Radioactive Sources (2010)

The International Atomic Energy Agency held this open-ended meeting from 17 to 21 May 2010 at the IAEA headquarters in Vienna under the chairmanship of Mr. Steven McIntosh from Australia. The meeting was attended by 160 experts from 92 IAEA member states and by observers from the Organization for Security and Co-operation in Europe (OSCE), the Organisation for Economic Co-operation and Development (OECD), the Food and Agriculture Organization (FAO), the International Source Suppliers and Producers Association (ISSPA) and the World Institute for Nuclear Security (WINS).

The objective of the meeting was to promote a wide exchange of information on national implementation of the code and the guidance. To date, 99 states have made a political commitment to implement the code, and 58 states have notified the Director General of the IAEA of their intention to act in accordance with the guidance on a harmonised basis.

During the second and third days of the meeting, countries were divided into three country groups. The country group sessions allowed for voluntary presentations and open discussions on all aspects related to the implementation of both the code and the guidance. Experts from 51 states gave presentations; in addition 37 states provided papers in advance of the meeting.

The key issues which were discussed during both the plenary and country group sessions were the following:

- The establishment and maintenance of a regulatory body or bodies, effectively independent of other functions with respect to radioactive sources, whereby effective independence is also determined by the standards of professional competence of the staff, their integrity, the availability of adequate financial resources and finally by the establishment of safety and security cultures.
- The assistance of the IAEA and bilateral programmes have helped in many cases to monitor, detect, handle and characterise radioactive sources. Such assistance was also used to upgrade security of transport operations and at facilities where high activity radioactive sources may be used or stored. Assistance from such programmes continues to be available upon request.
- It was noted that considerable progress has been made in the establishment and maintenance of a national register of Category 1 and 2 radioactive sources. In the future efforts should be made to ensure that legacy sources, i.e. sources which were acquired prior to national regulatory structures being put in place, were brought under control. Many states used the IAEA's Regulatory Authority Information System (RAIS) as the basis for the development of their national register.
- Particular attention was given to the subject of national strategies for gaining control over orphan sources, including arrangements for reporting loss of control and to encourage monitoring to detect orphan sources. With respect to orphan sources intercepted at borders, a number of technical and legal factors need to be taken into account and the meeting recommended that the matter should be examined by the IAEA with the objective of

developing some guidance. With respect to scrap metal, the IAEA advised that in July 2010, it would be holding a consultants' meeting to develop an initial draft proposal for an international agreement concerning the transboundary movement of radioactive material.

- Extensive discussions took place with regard to the management of disused sources. The return of disused sources to the supplier was a preferred management strategy in many states. However, it was recognised that states should develop and implement national strategies for end-of-life management of radioactive sources, where the supplier is not able to take the sources back. States should consider the need for the development of long-term storage or disposal facilities of radioactive sources for which no further use was foreseen.
- The implementation of the import and export provisions of the code and the guidance continues to be a challenge. The meeting therefore encouraged the development and use of bilateral or other administrative arrangements; it suggested that the IAEA should prepare a short document setting out the role of points of contact under the guidance so that states nominate an appropriate point of contact.
- EU member states mentioned difficulties in the simultaneous application of the code and Council Directive 2003/122/Euratom on high activity sealed radioactive sources and orphan sources.

A password protected website is dedicated to the participants of the meeting on which presentations and papers are made available by the IAEA.

Bilateral Agreements

Co-operation in the peaceful uses of nuclear energy:

Algeria and Jordan: Co-operation agreement in the fields of energy, nuclear energy, oil and gas,

Canada and India: Agreement on civilian nuclear co-operation,

France and Kuwait: Co-operation agreement on the development of peaceful nuclear energy,

India and the Russian Federation: Agreement to increase civilian nuclear energy co-operation,

India and the United Kingdom: Agreement on civilian nuclear co-operation,

Italy and the Russian Federation: Agreement of co-operation in the nuclear sector,

Japan and Kazakhstan: Agreement to co-operate in the peaceful uses of nuclear power,

Jordan and the United Kingdom: Pact on nuclear co-operation,

The United States and Vietnam: Memorandum of understanding on co-operation in civil nuclear energy activities.

Agreements on the construction and operation of nuclear power plants:

Argentina and the Russian Federation: Memorandum of understanding to co-operate in the peaceful uses of nuclear energy including the construction of a nuclear power plant and the supply of nuclear fuel,

India and the Russian Federation: Agreement on the construction of nuclear reactors in India,

The Russian Federation and Turkey: Protocol agreement to co-operate on the construction and operation of a nuclear power plant in Turkey,

South Korea and Turkey: Protocol agreement to co-operate on the construction of a nuclear plant in Turkey.

Agreement in the field of research and development:

Italy and the Russian Federation: Agreement on a joint study on nuclear fusion,

The IAEA and the European Commission's Joint Research Centre: Practical arrangement on co-operation in assistance, planning, research and development.

Agreement in the field of safeguards and non-proliferation:

The European Union and the IAEA: Agreement to implement “integrated safeguards” in all EU non-nuclear-weapon states with “significant” nuclear activities,

The IAEA and the Russian Federation: Agreement to establish an international nuclear fuel bank,

The Russian Federation and the United States: “New” START agreement on the reduction of deployed strategic nuclear warheads.

Bibliography and News Briefs

Bibliography

NEA – Publication dedicated to the 10th anniversary of the International School of Nuclear Law (2010)

In the summer of 2010, the NEA Legal Affairs Section will release a publication “International Nuclear Law – History, Evolution and Outlook” to commemorate the 10th anniversary of the International School of Nuclear Law (ISNL).

The book reflects what the ISNL delivers each year during the 2-week course at the University of Montpellier 1. It includes scholarly papers on the various fields of international nuclear law, i.e. international institutions; protection against ionizing radiation; nuclear safety; non-proliferation of nuclear weapons and safeguards; nuclear security; transport of nuclear material and fuel; management of spent fuel and radioactive waste; liability, compensation and insurance for nuclear damages; environmental protection and international trade in nuclear material and equipment.

The contributions are authored by renowned experts in the nuclear law field who are at the same time lecturers at the school. The purpose of the publication is to provide an overview of the international nuclear law instruments, their background, content, and development over the years and to present an outlook on future needs in the field of international nuclear law.

Nuclear Law by Stephen Tromans (2010)

The second edition of Stephen Tromans’ book, entitled “Nuclear Law – The Law Applying to Nuclear Installations and Radioactive Substances in its Historic Context”,¹ was released in March 2010. It is a much expanded version of the 1997 edition of “The Law of Nuclear Installations and Radioactive Substances”.

The book starts with a comprehensive information section on nuclear energy (exploring the atom, the first nuclear reactor, the bomb, radioactive waste management, accidents etc.). Almost entirely new are Chapters 2 and 3 on international aspects and on Euratom. The chapters on licensing and new build reflect the legal requirements in the United Kingdom, however bearing in mind the international and Community law which have an impact on the national licensing system. The international and U.K. regime governing nuclear third party liability are covered in Chapter 6. The book also deals with radiological protection (Chapter 7), safeguards and security (Chapter 8), use of radiological substances (Chapter 9), transport (Chapter 10), decommissioning (Chapter 11), and finally Chapter 12 covers an extensive section on radioactive waste.

The in-depth analysis of the various subjects is a very helpful practical guide to nuclear law matters, including both international and European Atomic Energy Community law governing uses of

1. Hart Publishing, ISBN 978-1-84113-857-2, pages: 546.

nuclear energy and radioactive substances. The author provides several national examples and comparisons; however, with respect to domestic legislation it is largely focused on U.K. law.

As an up-to-date reference tool, it is practical for experts providing information on the entire scope of nuclear activities and the framework applying to it; young professionals and students who learn nuclear law matters for the first time may use it as a textbook in which they can find explanatory notes, content and implication of laws as well as case-law. Given the renewed interest in nuclear power and discussions on “new build” all around the world, this book is both timely and informative on the life-time of nuclear installations.

Stephen Tromans QS is a barrister specialising in environmental, planning, energy and nuclear law.

News Briefs

European Atomic Energy Community

International Symposium on Non-Medical Imaging Exposures (2009)

The Haughton Institute, Dublin, organised on behalf of the European Commission an International Symposium on Non-Medical Imaging Exposures, held in Dublin from 8 to 9 October 2009. This event was a follow-up to the previous 2002 European Commission Symposium on Medico Legal Exposures. The symposium aimed to cover a wide variety of practices during which humans are exposed to X-rays for non-medical reasons (including the use of X-rays for age determination in children/adolescents, in airport security, sports medicine, insurance and employment processes, health assessment in immigration and emigration and their use in the prevention of illegal activities such as drug smuggling). It offered the opportunity to professionals involved in the use of X-rays for non-medical imaging purposes, and other interested parties, to exchange experiences and views about the ethical, legal, social and technical problems encountered with these practices.

International Conference on Modern Radiotherapy: Advances and Challenges in Radiation Protection of the Patients (2009)

The French Nuclear Safety Authority in co-operation with the International Atomic Energy Agency, the World Health Organization, the European Commission and three French Societies on Radiation Oncology, Medical Physics and Radioprotection organised an “International Conference on Modern Radiotherapy: Advances and Challenges in Radiation Protection of the Patients”, held in Versailles, France from 2 to 4 December 2009. The conference covered the overall topics from paradigms and challenges of radiotherapy in its different modalities, accidents and lessons identified to regulatory activities, clinical audits, controls and quality assurance. It provided a forum for participants to exchange experiences and to review the actions implemented to improve the radiation safety in radiotherapy at both national and international level.

European Nuclear Energy Leadership Academy

Founding agreement on the establishment of ENELA (2010)

Six nuclear energy related companies – Areva, Axpo AG, EnBW, E.ON Kernkraft GmbH, Urenco Limited and Vattenfall AB – established the European Nuclear Energy Leadership Academy (ENELA) by signing the founding multi-party agreement on 28 January 2010. ENELA will be located in Garching, Germany. The initiative has its origin in the European Nuclear Energy Forum (ENEF) and is supported by the European Commission. Mr. Jean-Claude Gauthier was nominated to be the first Director of ENELA.

The purpose of the academy is to train young graduates and employees with different backgrounds to take responsibilities in European nuclear energy corporations and institutions. The Academy will focus on particular European requirements and specifications (economics, politics, technology, legislation, safety standards, certifications) and will strive to fulfil the following goals:

- The strengthening and expansion of European expertise in the fields of nuclear energy management and leadership.
- Active support of a constructive interaction between both industrial and non-industrial stakeholders within the European community, with a special focus on political and public decision and policy-making.
- The establishment of a European think tank in the field of nuclear energy management and leadership.

For more information see ENELA's website at www.enela.eu.

International Atomic Energy Agency

International Expert Group on Nuclear Liability (2010)

The International Expert Group of Nuclear Liability (INLEX), established by the Director-General of the International Atomic Energy Agency (IAEA), held its 10th meeting from 12-14 May 2010 at the IAEA headquarters in Vienna.

Topics discussed included, *inter alia*, new developments in the field of civil liability for nuclear damage particularly with reference to the status of the international nuclear liability conventions and recent efforts to adopt or improve national legislation, the Workshop being co-organised by the European Commission (EC) and the Brussels Nuclear Law Association on the “Prospects for a Civil Nuclear Liability Regime in the Framework of the European Union”, the availability of insurance coverage to financially secure nuclear operators' liability under the revised Paris Convention and the revised Vienna Convention and the feasibility or otherwise of establishing an international pool of nuclear operators' funds, as well as the following major topics:

- On the proposals by Germany to allow contracting parties to exclude certain nuclear installations from the scope of application of the international nuclear liability conventions, the Group took note of a draft position paper – developed by a working group of the IAEA Safety Standards Committees outlining three exclusion criteria that a contracting party would need to apply against an installation proposed for exclusion, namely radiological criteria for the exclusion of a nuclear installation, a safety assessment

methodology for determining compliance with the criteria and the associated administrative and regulatory processes to be adopted by the requesting contracting party. The Group was informed that the proposal of the working group would be submitted to the relevant IAEA Safety Standards Committees – namely the Radiation Safety Standards Committee and Waste Safety Standards Committee – for consideration at their joint meeting on 28 June – 1 July 2010.

- With respect to the EC’s legal study on the possible options aimed at harmonising the nuclear liability regime within the European Union (EU), the Group welcomed the assurances that the EC would not pursue any option which would work against the possibility of the future creation of a global regime based on the Convention on Supplementary Compensation and that any proposal from the EC would work on the basis of the current nuclear liability principles, including channeling of liability exclusively to the operator.

In addition, the Group reviewed INLEX’s outreach activities with special reference to the “Fourth Workshop on Civil Liability for Nuclear Damage” which was held in Abu Dhabi, United Arab Emirates from 9 to 11 December 2009, and to the Fifth Workshop for countries of the Eastern Europe and Central Asia region to be held from 5 to 7 July 2010 in Moscow.

The Group also took note and provided comments on the draft explanatory document on the 1988 Joint Protocol on the Application of the Vienna Convention and the Paris Convention which will be published by the Agency as part of its Legal Series, under which the Agency already published in 2007 the explanatory texts for the 1997 Vienna Convention and the 1997 Convention on Supplementary Compensation.

Finally, the IAEA Secretariat briefed INLEX on the Agency’s legislative assistance activities, in particular on the establishment of a Nuclear Law Institute to meet the substantial increase in training requests received from member states.

The next meeting of INLEX will take place in May 2011.

Organisation for Economic Co-operation and Development

International Conference on Access to Civil Nuclear Energy (2010)

On 8 and 9 March 2010, the French Government in co-operation with the International Atomic Energy Agency and the Organisation for Economic Co-operation and Development (OECD) held an International Conference on Access to Civil Nuclear Energy at the OECD headquarters in Paris.

The conference addressed the goal of promoting the peaceful and responsible use of nuclear power. It provided a discussion forum for Governments of countries with an advanced nuclear programme and for those which wish to embark on such a programme. International organisations and the European Commission were also represented at the conference in order to help emerging nuclear power countries to comply with their international obligations. Finally, research and training bodies, the industry, the financial sector and other stakeholders participated in the discussions.

Today, many countries are considering the civil uses of nuclear energy basically to diversify energy sources and to combat climate change. The realisation of such plans requires, however, a sound technical, political and legal environment which countries cannot always provide for on their own,

thus making bilateral and international alliances vital. At the conference, the French Government and the international organisations demonstrated their willingness to assist countries in meeting the essential requirements of safety, security, non-proliferation and protection of the environment for future generations. Among the subjects given particular attention were the challenges of finding financing, obtaining access to technology as well as research and training needs.

The opening and closing speeches were given by France's highest level representatives, the French President and Prime Minister, the President of the European Commission, the Director General of the IAEA and the Secretary-General of the OECD. The six organised roundtables addressed the following subjects:

- Nuclear power and the energy mix in a sustainable development perspective;
- The responsible development of nuclear energy: what is an appropriate framework?
- How to support new nuclear countries?
- How to finance a nuclear programme?
- Training issues;
- The medium and long-term outlook for nuclear power.

The Director-General of the OECD Nuclear Energy Agency, Mr. Luis Echávarri, moderated the roundtable on "How to finance a nuclear programme".

More conference information is available at: <http://conferenceparis-nucleairecivil.org/pro/fiche/quest.jsp;jsessionid=D9EB5841BF129913F5AC7F1181DE21BA.g11>.

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