



KLC Law Firm and the Regulatory Frame of Nuclear Energy in Bulgaria

The regulatory frame of nuclear energy is based on the Law on Safe Use of Nuclear Energy adopted in 2002. This Law covers the activities associated with the state regulation of the safe use of nuclear energy and ionising radiation and with the safety of radioactive waste management and spent fuel management. It specifies the rights and duties of licensees in conducting those activities, to ensure nuclear safety and radiation protection. The law envisages the establishment of a state enterprise in charge with the radioactive waste management. The executive body empowered with substantial regulatory, licensing and supervision functions is the Nuclear Regulatory Agency.

In 2004 the Government adopted a national Strategy for Spent Nuclear Fuel and Radioactive Waste Management. This Strategy applies the principles of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management as well as the EU *acquis*.

There are 2 specialized nuclear funds established in order to guarantee specific activities for a period over 300 years. These are the Fund for Decommissioning of nuclear facilities and the Fund for Safe Keeping (Deposit) of Radioactive Waste. Bulgaria has already implemented an important investment program in view of safety of use of its nuclear facilities.

While the issue of safety of nuclear energy is positively solved and a number of international peer reviews have shown the satisfactory level of the safety of the Kozloduy Nuclear Power Plant, the waste management and decommissioning of the nuclear power plant units need additional efforts.

The State Enterprise Radioactive Waste (established in 2004) is in charge with the safety of radioactive waste (the latter becomes state property after its delivery to the enterprise) and the facilities where the waste is deposited and managed. Therefore the enterprise has as a main task the design and construction of the facilities needed, including the national repository.

The issue of preservation of radioactive waste is not solved yet. The planned construction of a national repository (for low and average radioactive waste) will solve the problem partially because regarding the most dangerous waste – nuclear fuel spent– there is no space for safe long-term storage. This type of waste requests the construction of a second repository. Nowadays Bulgaria gives back the fuel spent to Russia, which is very expensive service. The transportation becomes more difficult because the transit states are reluctant to admit on their territories the dangerous waste. According to the European Directives each member state shall store its radioactive waste by itself. According to the Strategy for Spent Nuclear Fuel and Radioactive Waste Management the first repository should be operational by 2015, and the second one – until 2030.

It is expected in view of the EU membership commitments the Strategy for Spent Nuclear Fuel and Radioactive Waste Management to be actualised in order to pre-formulate policies related to the effective resolution of issues related to the final stage of nuclear energy process.

In April 2009 a draft of Law for amending the Law on Safe Use of Nuclear Energy has been submitted to the Parliament. It aims at complying with the recent changes of international acts and the newest requirements of the EU *acquis* and International Atomic Energy Agency (IAEA). Actualization of the law will also reflect the accumulated 6 years experience of its application. The proposed amendments concern adaptation to the changed international acts (Convention for the Physical Protection of the Nuclear Material, Directive 2006/117/EUROATOM, Agreement on early exchange of information in case of danger of radiation between EURATOM and the EU member states, IAEA SF-1 Safety Fundamentals, etc.), changes in the licensing and permission regimes, specialized training, etc.)

Historically, we can add the following:

The Negotiation process with the EU in the field of energy sector ended with the closure of the Chapter 14 Energy in 2002. It included 4 problematic issues (topics):

- security of supplies
- competition and internal energy market
- energy efficiency and use of renewable energy sources
- Nuclear energy

In the area of nuclear energy and nuclear safety the Bulgarian authorities have established a viable decommissioning strategy to meet their commitments regarding the early closure and

subsequent decommissioning of units 1-4 of Kozloduy Nuclear Power Plant. Bulgaria terminated the exploitation of Unit 1 and Unit 2 of the Kozloduy Nuclear Power Plant in December 2002. Bulgaria accepted the EU Common Position (CONF-BG 79/01) for closure of the units 3 and 4 of the Kozloduy Nuclear Power Plant in 2006. In 2003 a peer review has been carried out which found that the units (3 and 4) were safe and the EU funds for their rehabilitation were used lawfully, but this opinion could not be a basis for suspension of the units closure.

The governmental commitments in the field of nuclear energy have been confirmed by the Accession Treaty. According to the Article 30 of the Protocol to the Accession Treaty Bulgaria has undertaken and fulfilled the commitment for decommissioning Unit 1 and Unit 2 of the Kozloduy Nuclear Power Plant before the year 2003, commits to the definitive closure of Unit 3 and Unit 4 of this plant in 2006 and to subsequent decommissioning of these units. Against the closure the EC has allocated financial assistance amounting to EUR 210 million (for the period 2007-2009) in support of Bulgaria's efforts to decommission and to address the consequences of the closure of Units 1 to 4 of the Kozloduy Nuclear Power Plant. According to the art. 30 of the Treaty *the assistance shall, inter alia, cover: measures in support of the decommissioning of Units 1 to 4 of the Kozloduy Nuclear Power Plant; measures for environmental upgrading in line with the acquis; measures for the modernization of the conventional energy production, transmission and distribution sectors in Bulgaria; measures to improve energy efficiency, to enhance the use of renewable energy sources and to improve security of energy supply. The assistance, or parts thereof, may be made available as a Community contribution to the Kozloduy International Decommissioning Support Fund, managed by the European Bank for Reconstruction and Development.*