

The European Commission and Member States: Conflict Over Nuclear Safety

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Abstract: Nuclear energy has received increased attention in the European Union (EU) as a source of energy with the enlargement of 10 members many with Soviet designed nuclear power plants. It has been discussed as an alternative to fossil fuel plants as a strategy to meet Kyoto Protocol goals, reducing greenhouse gas emissions. However nuclear security and safety issues are major concerns. The European Union Commission introduced legislation harmonizing existing safety standards for all Member States. However, a conflict emerged between the Commission and Member States as to whether the EU should expand its legal authority in an area that has been the responsibility of the Member States. EU institutions have been unable to develop harmonized standards for nuclear power plants leaving issues of safety and the long-term disposal of radioactive waste and spent fuel unresolved.

Key words: nuclear energy, nuclear safety, European Union, member states, legal responsibility, harmonization of standards

This research focuses on the development of legislation addressing safety for nuclear power plants in the European Union (EU). Whether or not the Treaties of the European Union give competency in the area of nuclear safety of nuclear installations has become a matter of controversy. For the most part, safety issues have been beyond the scope of EU legislation. While the Treaties of the European Union do not give specific competency in energy policy to the EU, putting nuclear energy safety issues beyond the scope of legislation, the European Commission (Commission) has recently sought to provide uniformity through the development of Community-wide safety standards complementing existing approaches to nuclear safety, with the proposal of new directives.

A conflict emerged between the Commission, which proposed harmonizing safety standards across the EU and the Member States concerned about protecting their own national regulatory regimes for nuclear energy. Some Member States have had long-term experience in nuclear energy having developed regulations to suit their particular thresholds of safety. They neither want to adopt standards of other Member States or be subject to an EU “supranational” authority.

This article reviews and analyzes the proposals for the safety of nuclear power plants and the forces that led to Commission proposals for new and stronger legislation based on provisions in the Euratom Treaty (1957). As will be discussed below, the enlargement of the EU made the issue of nuclear safe-

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ty more urgent because some of the new entrants had Soviet designed nuclear reactors. Soviet nuclear technology was considered problematic because of memories of the Chernobyl nuclear disaster in 1986. The new Member States may also be more inclined to build more nuclear power plants now because of planned closures of unsafe plants as a condition of EU accession as well as to reduce dependence on present Russian sources of fossil fuel, i.e. oil and natural gas.

The overarching question is whether Member States would agree with the Commission that it was appropriate to increase its regulatory powers thereby reducing the authority of Member States in nuclear safety regulation. National interest could either point toward keeping the status quo, recognizing national sovereignty interests, or supporting uniform safety standards ensuring that all EU citizens have a protected level playing field. The negative referenda regarding the adoption of the proposed Treaty on the Constitution in France and the Netherlands as well as the slow-down of new legislative initiatives by the Commission, puts the latter course in doubt. This research does not address nuclear proliferation although any increase or questionable management of radioactive material leaves open the possibility of military use.

The attention in the EU has been focused primarily on security of energy supply and liberalization of the electricity market not on safety. Because electricity derived from nuclear power plants has been the responsibility of the Member States, levels of safety vary. The Euratom Treaty allows for the Community to set standards for exposure to ionizing radiation to protect the health of the public and workers as well as the transport of nuclear material. In the 1990s, the Commission more seriously considered energy policy from a security perspective as a result of increased energy demand, dwindling energy supplies, meeting Kyoto Protocol goals and the growing demand for diversification of energy resources. Nuclear energy remained an option especially in view of the dangers of global warming and a need for multiple sources of reliable energy (Taylor, 2002).

The argument for increased nuclear energy stems not only from its important contribution to base load electricity, but that without it, reduction in carbon dioxide levels could not be realistically achieved. Proponents of this view argue that the technological problems of long-term waste disposal will be solved because geologically sound sites will eventually become available. It has been transformed from a technological problem to a political, i.e. public opinion, one. The challenge for this group is to convince the public nuclear energy is safe. However, others argue that with EU enlargement the nuclear energy club has grown and along with the risks, i.e. terrorism, problems with existing temporary radioactive waste repositories and lack of permanent long-term disposal sites remain.

However, the political scene is not all that clear (European Voice, 2006). Some Member States, i.e. Germany, the Netherlands, Belgium, Sweden and Italy, previously pledged to phase out their nuclear power plants, may be rethinking their policy (European Commission 2002 a). But for others, it is their desire that the nuclear option remain open.¹ France has announced the building of a new plant. Slovakia may be now reevaluating its nuclear options as is Lithuania and the Czech Republic. Moreover, operating nuclear reactors

are ageing. Governments are considering extending their operational licenses rather than closing them which raises additional issues of their safety.

A CONFLUENCE OF PROBLEMS

The management of high level radioactive waste was identified as a special problem by the Commission because of dangers associated with reprocessing, transporting and long-term storage. The issue became more pressing as discussions and negotiations for enlargement ensued in the 1990s. "There is no disposal route available anywhere in the world for the most hazardous radioactive waste... there are significant accumulations of such waste in temporary surface and near surface storage facilities in those EU member States with active or past nuclear power programmes" (Webster, 2003, iv-v). Public acceptance of nuclear power depends on a satisfactory resolution of the nuclear waste disposal issue.² The situation is particularly grim among some Central and Eastern European (CEE) states which now have to suddenly store radioactive waste on site. Until the early 1990s it had been their custom to ship the waste to the Soviet Union but now Russia no longer accepts it if it is not Russian fuel.

Many of the candidate states had Soviet designed plants that needed to be upgraded or closed, concluded a 1992 G-7 summit. Agenda 2000 (Com (97) 2000) and the Laeken Council in December 2001 made a commitment that a high level of nuclear safety was a goal that became integral to the accession process. The EU provided resources primarily through its PHARE (Poland Hungary Aid for Economic Reconstruction) and TACIS (Technical Aid for the Commonwealth of Independent States) programmes for assessing and improving safety in these Russian designed reactors. Bulgaria and Lithuania were given significant technical support during the accession process.

The legacy of these problematic Soviet designed nuclear power plants was a potential boon to the nuclear industry. While closure could have contributed to the demise of nuclear energy in Europe, nuclear engineering and construction firms, anxious for new business, lobbied to keep the plants in the former Communist states open and to continue construction of unfinished plants. Safety standards would be important to relieve public fears of another Chernobyl.

Another Russian link with CEE states has been through the exchange of natural gas and oil for currency. There is concern that Russia could stop the flow of resources at any time for political reasons. Former Communist states have unpleasant memories of their past relationship with the Soviet Union. Since enlargement, the EU has become more sensitive to this reality. Natural gas imports provide electricity to Finland, Slovakia, Estonia, Latvia, Lithuania, Hungary, Poland and the Czech Republic. One way to reduce their reliance on Russian natural gas is to expand their nuclear sectors.

The EU is at an energy policy crossroads. Decisions must be made concerning the proper role for EU authority in energy policy.³ The issue of safety standards could provide impetus to refocus attention on nuclear energy. In 2000, a controversy over the Czech Republic's Temelin nuclear power plant gave the EU an opportunity to intervene as a mediator between the Czech Republic and Austria. The latter opposed the upgrading and operationalization of the plant because of safety issues and its close proximity to the Aus-

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trian border. Austria argued that a state should be able to protect its citizens against potential harm – in this case – risks associated with a Soviet designed nuclear power plant upgraded by an American company, Westinghouse. Austria hoped that taking the issue to a larger arena, the EU, support could be garnered for limiting or opposing further expansion of nuclear power. If not, at least, union-wide standards could be developed that would ensure a high level of safety. However, the irony was that, with the latter strategy, uniform EU standards could actually lend support to the nuclear industry by calming public fears about the risks associated with the nuclear option. Public acceptance of nuclear power plants might grow if there were equally high safety standards throughout the EU. Another risk was that the uniform standards would be very general or end up as the lowest common denominator. In that case, the public might be assuaged, but in reality, safety would not have been improved.

GETTING NUCLEAR ENERGY SAFETY ON THE EU AGENDA

One of the consequences of enlargement was the attempt to develop an EU policy for nuclear energy. The accession process led the Member States to recognize that national authorities should have an exclusive role in promoting safety in the candidate countries. The Council established a temporary Working Party on Nuclear Safety composed of experts from the Member States to evaluate the status of nuclear power in the accession states. It issued a “non-paper” (European Commission, 2000) with soft recommendations for strategies for regulatory authorities and management practices in line with the best practices. Also prepared were country reports on nuclear safety in the candidate states – an area outside the ‘acquis’, which is the body of EU legislation. There were underlying concerns because most of the candidate states were former Communist countries undergoing political reform and there was a mistrust of their nuclear sector with memories of the Chernobyl disaster and as knowledge of serious technological problems surfaced.

Until the 1990s, research in nuclear energy for the Commission was carried out by the Research Directorate and the Joint Research Centres throughout Europe including Germany, the United Kingdom and the Netherlands. As focus increased on policy issues, i.e. environmental protection implications, DG-Environment was given responsibility for these research activities. In late 2000, these policy aspects were transferred to DG- Energy and Transport (TREN). DG-Environment had responsibility for the European Court of Justice (ECJ) case (discussed below) regarding EU competency in nuclear energy, but many of its staff were not enthusiastic about promoting nuclear power. As part of a further internal reorganization, in February 2003, radiation protection was also transferred to DG-TREN from DG-Environment. In addition to DG-TREN personnel in Luxembourg whose responsibilities were related to implementing provisions of the Euratom Treaty, in 2004 other activities were also transferred to Luxembourg. DG-TREN personnel operate from two countries, Luxembourg and Belgium. The transfer of the nuclear dossier from an environmentally focused unit to an energy based one may influence the debate in the Commission. One directorate’s orientation is environmental impact and safety; the other’s is energy supply and market liberalization.

By 2002, the Commission position that would later be challenged by some Member States, was that it already had a de facto a role in nuclear safety. However, the nuclear states, over the years had developed their own nuclear programs independent of each other. Types of reactors differed among Member States as did safety procedures and regulatory institutions. This resulted in a lack of uniform safety standards and procedures in the EU. The nuclear Member States generally opposed the EU's authority over their nuclear safety programs and did not want non-nuclear states to participate in decisions affecting their own programmes. Nuclear power plants in the candidate states: Lithuania, Bulgaria, Slovakia, the Czech Republic and Hungary raised safety concerns. Member States wanted safety assessments of these candidate states. The difficulty was that, without EU competency in nuclear safety, how would safety be ensured in the new states?⁴

During the 1990s, representatives from Member States' nuclear regulatory authorities participated in the Nuclear Regulatory Working Group (NRWG), organized by the Commission to discuss common issues of nuclear safety. Candidate states were included as well. The goal was to increase harmonization of national practices, i.e. understanding of and removal of differences. The CONCERT (CONCERTation on European Regulatory Tasks; advisory to the Commission and formed in 1992) was another group adding the Newly Independent States (NIS) (Russia, Armenia, Kazakhstan, Belarus and Ukraine) to the NRWG members. It is a less structured and technical forum to share experiences. While it is not focused on enlargement, it does facilitate the identification of projects for possible EU funding. There was discussion of the range of practices in order to "promote good practice". There was not an attempt yet to "standardize practices, common approaches or oversight by a centralized body" (European Commission, 1999).

The Euratom Treaty does not give the EU specific authority to legislate in nuclear safety issues or specific standards other than the protection of the public against ionizing radiation and the transport of radioactive material (Chapter III, Article 30). Under Euratom, which was envisioned to aid Europe's recovery from the economic depression following World War II, a relationship existed between the Commission and the regulators (Euratom, Chapter VII). According to Pamela Barnes, a noted EU scholar, neither a state nor the nuclear industry wanted interference from the EU (Barnes, 2003). There is also provision for nuclear safety inspectors, appointed by the Commission, who have right of access to nuclear power plants concerning the handling of nuclear material (Chapter VII, Article 81) and declaration of intention (of usage). The Commission can impose sanctions and even take an infringement to the European Court of Justice (ECJ) (Chapter VII, Article 83.1).

The preamble to the Euratom Treaty promotes nuclear energy: "Recognizing that nuclear energy represents an essential resource for the development and invigoration of industry and will permit the advancement of the cause of peace..." It goes on: "Resolved to create the conditions necessary for the development of a powerful nuclear industry which will provide extensive energy resources..." Article 4 describes how it will be done. "The Commission shall be responsible for promoting and facilitating nuclear standards in the Member States and for complementing it by carrying out a Community re-

search and training program.” The Commission also disseminates the results of its research to the Member States supplying financial resources when needed and promoting joint financing of projects (Article 6). It has been argued by those advocating reform of the Euratom Treaty that the dual purpose of promotion and regulation of nuclear energy, represents a conflict of interest for the Commission.

The enlargement process gave the Commission the opportunity to review its non-binding and voluntary cooperative approaches to nuclear safety not only in the candidate states. Since 1972 Member States had been consulting with each other on safety issues but not on nuclear vessel reactor safety or the disposal of radioactive waste. The Council Resolution of 22 July 1975 (OJ C185 14/08/1975) recommended progressive harmonization of safety standards at the EU level without lowering standards. Harmonization was encouraged through consensus on common positions. It called for Member State collaboration also recognizing the importance of safety beyond European Community borders.⁵ Review of nuclear installations was part of the accession process. Another Resolution (OJ 172, 08.07.1992) asked the Commission and the Member States to cooperate in the nuclear fields with special attention to CEE states and the NIS and Resolution OJ C 158 25/06/92, encouraged the development of cooperation with CEE states in the management and storage of spent nuclear fuel. Another potential legal basis for competency in nuclear installation safety could be based on the Environment Impact Assessment directive (85/337/CEE of 27 June 1985) if used in relation to siting.⁶

On the international scene, there is an agreement, the 1996 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management entered into force in 2001, under International Atomic Energy Agency (IAEA) auspices that is voluntary. The IAEA has established general principles and guidelines but are considered too broad and non-binding to be meaningful by some. Despite 25 years of consultation and utilization of IAEA guidelines, Commission attempts to harmonize safety practices have been unsuccessful with the result being disparate and differing standards, systems and procedures in the Member States.

The overarching goal of the Commission was to strengthen its competency in nuclear safety especially since the EU was getting larger. With prospects for even further enlargement in the future, the Commission wanted to create an environment that was supportive of nuclear energy development keeping the nuclear option open. Moreover, the harmonization of a high level of safety standards, a long-term goal of the Commission now had a strategic justification – the meeting of Kyoto targets for greenhouse gas reduction and an alternate energy source enhancing security of supply. The Commission advocated transparency, communication and public participation throughout the standard setting process. “The Commission will do everything it can to promote – with full openness and transparency – the conditions necessary for the nuclear option to remain open safely” (De Esteben, 2002, 7). The controversy turned on whether the Euratom Treaty could be used as legal basis for the Commission to go forward with harmonized standards.

The decommissioning of nuclear plants was another problem of grave concern. Plant managers were not under obligation to address decommissioning until absolutely necessary. According to the Commission, a culture of environmental concern was missing. Large quantities of radioactive material needed to be treated according to safety standards to protect public health. Decommissioning costs needed to be dedicated to cover the entire decommissioning process, but total costs were uncertain and could only be estimated. The Commission found that Member States approaches to decommissioning differed and it was often unclear who was responsible. "It is necessary to consider nuclear safety in a Community perspective. Only a common approach can guarantee the maintenance of a high level of safety in nuclear installations from inception to decommission, in an enlarged EU" (European Commission, 2003a).

INTRODUCTION OF DRAFT DIRECTIVES

Addressing the absence of binding legislation and building on existing soft non-binding cooperation by Member States, in November 2002, the Commission proposed a legislative package to deal with nuclear safety and the management of radioactive waste broadening the definition of civilian nuclear facility to include associated land, buildings and equipment where radioactive materials are processed, handled, stored and disposed of. Because the enlargement process brought in former Communist states, some with questionable nuclear facilities, the Commission reasoned that a high level of safety standards for all, would bring about a level playing field in nuclear reactor safety and the management of radioactive waste. Here was an opportunity whereby the monitoring of nuclear safety in both candidate states and EU members was possible. After all, safety standards differed among existing Member States as well. The Commission wanted to introduce common standards and monitoring mechanisms for nuclear safety that would be legally binding throughout the EU.

The Commission was assisted by an unrelated but coincidentally timely decision of the ECJ. The preamble of the proposed directives states that the legal base for the directives existed in the Euratom Treaty. In Case C-29/99 of December 10, 2002, the Court recognized the right of the Community to legislate in the area of nuclear safety and radioactive waste management arguing that the EU did have competency thereby supporting the Commission position that it could establish a European authority (Court of Justice of the European Communities, 2002a). The Court found that Chapter III, "...under Articles 30–32 of the Euratom Treaty the Community possesses legislative competence to establish, for the purpose of health protection, an authorization system which must be applied by the Member States" (Court of Justice of the European Communities, 2002b). This includes the power to require Member States to draw up plans for establishing measures for emergencies at nuclear plants (Court of Justice of the European Communities, 2002c). Article 33 (Euratom) gave the Commission the right to harmonize safety standards with the assistance of the Member States. Member States must also communicate to the Commission progress of their implementation (Court of Justice of the European Communities, 2002d). Article 37 (Euratom) gave the Community

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competence for disposal of radioactive waste because of potential contamination of the environment of another Member State (Court of Justice of the European Communities, 2002e).

The Court found that the Euratom Treaty instructed "... the Community to establish uniform safety standards to protect the health of workers and of the general public and to ensure that they are applied" (Court of Justice of the European Communities, 2002f). That protection could only be achieved by controlling the source of radiation, i.e. the nuclear installation. The Commission also had competency through Chapter III (Euratom) to establish harmonized standards for radioactive waste disposal. While this decision supported the Commission, and not the Council, some Member States continued to take issue with the ECJ contending that Chapter III (Euratom) does not apply specifically to nuclear safety installations.

The draft directives (2003/0221 (CNS) and 2003/0022 (CNS), (COM 2003) 32 final, Brussels, 30. 1. 2003) were referred to the Group of Experts (advisory to the Commission) as required in Article 31 of the Euratom Treaty. It commended the Commission for promoting the highest level of nuclear safety in the EU but was concerned that "policy options and planning flexibility" of Member States would be limited (Group of Experts, 2002). This may explain why "framework" was dropped from the title of the directives when they were introduced in January 2003. A framework directive suggests there will be daughter directives following with greater specificity and direction (European Commission, 2003b). Perhaps the Commission realized that this would not be possible. The Commission proposed a two-pronged approach: the development of standards and a mechanism to verify compliance. The Commission intended to develop a legal framework for standards and verification schemes using national experts (referred to in Article 31 of the Euratom Treaty) to be operational by the time of enlargement in May 2004.

Article 3 of the "proposal for a Directive setting out basic obligations and general principles on the safety of nuclear installations" (European Commission, 2003c), required every Member State to have an independent safety authority separate from any body that had promoted nuclear energy. Its role was to regulate nuclear plant safety, approve licensing and monitor implementation of regulations.

Article 5 mandated that Member States were to establish mechanisms to protect individuals and the environment from ionizing radiation, prevent radiological events from happening and, especially ensure safety during the management of nuclear materials including the decommissioning of nuclear plants.

Article 8 mandated inspections by Member States' safety authorities. Article 9 stipulated that Member States were responsible for adequate availability of financial resources to cover nuclear plant safety and decommissioning. Article 11 required Member States to have the operator of nuclear plants notify the safety authority of incidents or accidents as well as corrective actions.

Monitoring was critical to the realization of a high level of safety and effective implementation of the legislation. Therefore Article 12 gave the Commission responsibility for "ensuring verifications of safety authorities". The Commission would assess the way safety authorities perform their responsi-

bilities. The Commission would receive reports from safety experts appointed by Member States who together with Commission staff carry out the verifications. These experts from the Member States act for the Commission to verify compliance. It was thought of as a “peer review system to inspect the inspectors”, and not an EU inspectorate (European Commission, 2002b). The Commission would send reports back to the Member States with notice of remediation to be done. To maintain transparency, the Commission would receive annual reports from the member states on the progress of fulfilling the goals of the directive. The Commission would then submit a bi-annual report to the Council and the Parliament.

An annex to the proposed directive specified in more detail the strategy for maintaining adequate funds for decommissioning. They were to come from plant operators and included long-term management of spent fuel. Funds were to be liquid and not to be used for any other purpose. They were to be independent from the control of the plant operator unless that was impossible.

The problem addressed by the second proposed directive was the disposal of nuclear waste or spent fuel. The lack of resolution of this problem was an impediment to greater public acceptance of the nuclear energy option. Most high level radioactive waste from nuclear power plants lacked a final disposal route (Webster, 2003, iii–v). Waste is stored in temporary surface sites which is dangerous from both health and security perspectives. The danger is compounded by the situation in the newly admitted states. Soviet designed RMBK type plants produce more waste and these states may have less available funds for adequate waste management.⁷ For example, the Czech Republic produces significant high level radioactive waste from its nuclear reactors and uranium mining and does not project the availability of a deep geological disposal site for decades. Estonia has no strategy for siting, Bulgaria which formerly returned nuclear spent fuel to Russia is in the same situation. Most countries lack procedures and standards for even selecting geologically sound disposal sites. Only a few have begun the process of site selection.

The Proposal on the safe management of spent nuclear fuel and radioactive waste, addressed the lack of plans for long-term disposal. Although some Member States use spent nuclear fuel as a resource to produce fissionable material, it was not considered as an option. Reprocessing is very expensive and yields even more toxic material. (The United Kingdom is winding down its reprocessing activity.) However, if the price of uranium rises, reprocessing may be more economical than long-term waste disposal. The legislation called for a time-table for Member States to establish national programs for deep disposal burial by 2008 and operationalization by 2018. It also mandated the establishment of rules for safe and consistent management of nuclear waste throughout the EU. The goal was to force Member States to deal with a problem that would impact future generations by the setting of deadlines and harmonizing approaches maintaining Member State responsibility. Key to the legislation was Article 7 that required Member States to forward to the Commission every three years, a report on the status of implementation of the legislation. The Commission would integrate and publish the information in the report. The annex to the legislation was clear on the intent – an open and transparent role for the public, i.e. local communities could testify during site

selection. To encourage Member States to take action quickly, timetables were required.

EU INSTITUTIONS RESPOND

These two directives were debated in Council during the Irish and Italian presidencies and failed. They were discussed in meetings of experts (Working Party) and more informal bilateral consultations. They were considered at the ambassadorial level in November 2003 and May 2004 but could not secure a qualified majority vote although there was agreement on much of the text. The Council adopted conclusions that were similar to the defeated proposals but were voluntary.

Parliament agreed in principle with the need for greater safety but expressed concern about transferring competence that had been in the domain of the Member States to the EU (Committee on Industry, External Trade, Research and Energy, 2003). Referring to the proposed directive on the safety of nuclear installations (European Commission, 2003d), Parliament argued that responsibility lay with the plant operator and the safety authority. It noted the lack of specificity in a procedure for drawing up the technical standards and the approval process. Furthermore, it was concerned that since the directive was not a framework directive, there still needed to be additional legislation to make nuclear safety legally binding. It wanted the verification process clarified, i.e. a review role for international experts. Parliament suggested amendments to the proposed directives for the following reasons: 1) the legal basis still remained unclear for the extension of health protection under Chapter III, Title 2 of the Euratom Treaty, to cover radiation and nuclear safety standards; 2) not being a framework directive, the Commission would therefore not be preparing subsequent and more detailed directives; 3) there was concern that the Commission would expand its competence by creating standards based on best practices that would be legally binding; and 4) there was inadequate information on cost projection and personnel for inspection reporting.

Amendments suggested by Parliament eliminated references to “uniform EU safety standards” substituting “safety principles”, as well as eliminating the primary role for the Commission in guaranteeing nuclear safety. The “prime responsibility for the safety of nuclear installations rests with the license holder under the control of its national safety authorities” (European Parliament, 2003a). Parliament substituted a peer review mechanism (European Parliament 2003b) to review conformity to the directive thereby eliminating the role of the Commission. Whenever it could, Parliament tried to reduce the role of the Commission.

The Parliament resolution on the management of nuclear waste directive changed the language so that the “highest” standards and levels of protection were to be achieved (European Parliament, 2004). It sought to cover above ground or underground disposal facilities. It was also more stringent in specifically referring to steps to preclude radioactive contamination of the environment. Parliament’s amendments excluded disposal at sea, under-sea repositories and in space. No Member State should be forced to accept radioactive waste from another Member State. Parliament wanted the public to be included in the decision-making process for site selection of long-term

high level waste repositories. However, it eliminated the mandatory timetable because it did not account for differences in existing and developing programs and could result in compromised safety. Member States had to inform the Commission of their national programmes by 2006 and they could fix their own implementation schedules. The Parliament, concerned about the sufficiency of financial resources to cover decommissioning and waste management, asked for separate accounts to be reviewed by an outside body. The funds would come from plant operators. Parliament added this provision as an annex to the Proposal for a Council (Euratom) directive on the management of spent nuclear fuel and radioactive waste European Commission, (2003d). The Commission had had a similar provision as part of the companion directive. Parliament was also concerned about the environmental impact from the transportation of radioactive waste repositories and wanted “those affected by a decision of an authority or regulatory body”, to have party status in any proceedings regardless of national borders (European Parliament, 2003c). This was not incorporated in the revised directive proposed by the Commission which requires Member States to inform the public about the process of site selection and progress of decision-making in addition to consulting with affected local communities. There is no mention of party status.

THE COMMISSION REVISES THE DIRECTIVES

After months of consultation in international settings, discussion in the Council and the opinion of Parliament, the Commission proposed a revised nuclear package on September 8, 2004. It affirmed many of Parliament’s amendments but eliminated controls and requirements to ensure adequate financial resources for decommissioning to be held separate and secure from funds under the control of the plant operator. Article 7 of the Amended proposal for a Council directive (Euratom) laying down basic obligations and general principles on the safety of nuclear installations (the revised directive) only stated that “Member States shall take the necessary measures of the allocation of responsibility for the decommissioning of nuclear installations, including in those cases where the parties originally responsible are no longer able to meet their commitments” (European Commission, 2004a). The Commission also supported Parliament’s recommendation to establish a Committee of Regulatory Authorities (“The Committee”) comprised of Member State representatives to encourage exchange of information, define guidelines for national reports and use the Commission as a secretariat (European Commission, 2004b). The Commission eliminated references to high EU safety standards and substituted “Member States shall ensure that all reasonably achievable measures are implemented to ensure a high level of safety in nuclear installations” (European Commission, 2004c). Also eliminated was reference to the “polluter pays” principle referring to financial responsibility for radioactive waste including decommissioning. The section requiring that Member States ensure availability of financial resources for safety and decommissioning was eliminated and substituted with “Member States shall take the appropriate steps to ensure that adequate financial resources are available from the regulatory body and the operators to support the safety of nuclear installations throughout their life” (European Commission, 2004d).

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Equally significant was the elimination of specific deadlines for a management program to site long-term disposal, replaced by an open non-binding timetable (European Commission, 2004e). Both Parliament and Member States disagreed with the Commission timetable requirement preferring to leave it to the discretion of the Member States.

As the companion directive on the safe management of the spent nuclear fuel and radioactive waste provides, a Committee of Experts (European Commission, 2004f) would be established with its members selected by the Member States, to adopt rules of procedure. The Commission would serve as the Secretariat receiving reports from Member States every three years, forwarding them to Parliament and the Council with consultation with the Committee. Article 8 directs the Committee along with the Commission, to establish guidelines for reports. The Committee would review the reports (of Member State activities), issuing an opinion with recommendations to the Member States.

STAKEHOLDERS AND EU INSTITUTIONS TAKE A STAND

Major opponents to a Community-wide approach that were able to substantially reduce the proposed scope and binding compliance mechanisms have been: the United Kingdom, Finland, Sweden and Germany and possibly Lithuania, the Czech Republic, Hungary and Slovakia. The first four states have enough votes to bloc the legislation. Some of the newer states, i.e. post-Communist, may have seen the directives as a substitution of influence from Moscow to Brussels. Member States may also resist moves they think will compromise existing national approaches and institutions, i.e., safety authorities in the Member States, preferring to preserve safety as their own responsibility.

The United Kingdom claims the directives will not improve nuclear safety but could damage the existing national system. It did not want an EU peer review team checking on its plants, some of which lack double containment vessels. Some Member States argue that there could be duplication of the work of the IAEA (European Voice, 2004). Finland is now committed to the building of a new nuclear plant and has designated a site for long-term deep disposal at Okiluoto. It will be decided by 2010. These states do not want interference from the Commission. France has supported the Commission position, perhaps because of its influential role in developing best practices of safety requirements for nuclear reactors as part of Western European Nuclear Regulators Association (WENRA). France may hope to continue its leadership role.

The Commission had wanted segregated funds for decommissioning for each utility with a separate audit to prevent use of funds by a utility for other purposes, e.g. reinvestment in other countries that could be considered anti-competitive. It had wanted to move towards mandatory standards, unlike the general principles of the IAEA, but the Council was resistant (European Commission, 2004g). France and Germany have invested decommissioning funds in outside projects while other states have no restrictions on how the funds are spent. It appears that many Member States are not ready to share another policy area with Brussels.

Commission officials view the Member States as having an advantage with greater resources and personnel. All the Commission can do presently is to assist national authorities with their programs. What the Commission would like to accomplish and its proposed directives would be a first step towards, is to open the door to the development of legally binding community-wide standards for nuclear safety and the management of radioactive waste. Member States may be afraid of just that – strengthening of the proposed directives over time by the Commission.

For critics of nuclear energy expansion, approving this legislation with its promise of safety standards gives the appearance that, in fact, nuclear energy is safe. However, some like Germany's former Environment Minister, Jürgen Trittin, may want to keep a barrier, i.e. lack of safety standards, to thwart nuclear energy development. There is an unusual commonality of interest among national regulatory bodies, some Member States and anti-nuclear groups, e.g., Greenpeace opposes the directives. Another non-governmental organization (NGO), Friends of the Earth (FOE) is concerned that given the current situation, if legislation is passed, it will strengthen the nuclear energy industry without a guarantee of greater safety (European Voice, 2004).

Another argument from the opposition is that if Euratom if not revised it will continue to represent an inherent conflict, since it both promotes and regulates nuclear energy. Article 1 (Euratom) is pro-nuclear: "Recognizing that nuclear energy represents an essential resource for the development and invigoration of industry and will permit the advancement of the cause of peace." IAEA, FOE claims, also regulates and promotes nuclear energy. But in an open market, a level-playing field is not served when the rules and the organizations that implement them are biased. Mark Johnston, of FOE, would like parts of Euratom included in the proposed Treaty on the Constitution in a nuclear safety and security chapter along with the creation of a secondary level agency to implement regulations (Friends of the Earth, 2004). The Council, however, may be concerned about a long-term financial obligation since the clean-up and management costs of existing plants could be staggering. The Council would not want to create an opportunity for back-door subsidies by the EU.

There was discussion of joining Euratom to the proposed Treaty on the Constitution but some Member States rejected the idea. If Euratom is not reformed there has been the suggestion that the Treaty be voted down. Austria, Germany, Hungary, Ireland, Sweden and the European Parliament asked for a review or a conference of states in Declaration 44 attached to the Treaty on the Constitution so that Euratom could be brought up-to-date repealing the obsolete provisions. The Declaration also noted the lack of democratic decision-making procedures and promotion of nuclear power in Euratom. The signatories supported the idea of a Conference of the Representatives of the governments of the Member States, which should be convened as soon as possible (Conference of the Representatives of the Governments of the Member States, 2004). Parliament, in its resolution regarding the Constitution, declared that it "Welcomes the separation of the Euratom Treaty from the legal structure of the future Constitution; urges the Intergovernmental Conference to convene a Treaty revision conference in order to repeal the obsolete and

outdated provisions of that Treaty, especially those relating to the promotion of nuclear energy and the lack of democratic decision-making procedures” (European Parliament, 2003d).

Although DG-TREN Commissioner Loyola de Palacio wanted the directives to be approved quickly and during her term, that was not to be. The Commission lacked agreement from the Parliament and the Council. In June 2004, the Council had adopted conclusions reaffirming the goal of a high level of nuclear safety and safe management of radioactive waste as embodied in the proposed directives. It directed Member States along with the Commission to participate in the review meetings under the Convention on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management as well as the work of WENRA “...to engage in a wide ranging consultation process facilitating the choice of instrument(s), in the framework of the Euratom Treaty, that can contribute more effectively to achieving nuclear safety...” during the next year (European Council, 2004a). Austria, Italy and Luxembourg regretted the inability to pass the directives in an Annex to the June 2004 conclusions. They reiterated the need for a high level of uniform Community-wide standards covering the full life-cycle of a nuclear installation. (European Council, 2004b)

When the Council was still unable to pass the revised proposed directives it issued an Action Plan in December 2004. The Council recommended an exchange of information among Member States on decommissioning within the Euratom framework (European Council, 2004c). Those Member States that had not already done so were asked to sign the Joint Convention on Nuclear Safety and all were to continue to participate in the review meetings referred to in the June conclusions, informing the Working Party on Atomic Questions, of their progress. The Council meeting of 13 January 2005 had on its agenda a discussion of the Action Plan. The Council conclusions established a consultative process, including the participation of the Member States and the Commission to review the state of nuclear safety and radioactive waste management and recommend whether this legislative approach or a new Community instrument would better achieve the goal of nuclear safety throughout the EU. The Council said it would issue a report on the exchange of views of by the delegations to the Council with recommendations at mid-term (European Council, 2005a). However, it is more likely that the results of the process will not be published until the end of 2006. As of May 2005, the Parliament has not reintroduced the legislation. A spillage of radioactive liquid at the UK Sellafield nuclear site in May 2005, forcing closure of one reprocessing center, gave the Commission another opportunity to call for greater control over nuclear installations to prevent accidents stemming from poor national regulatory controls resulting in inadequate records and insufficient inspections by the EU.

CONCLUDING THOUGHTS

The controversy over nuclear energy safety legislation turns on the role of the EU in developing and ensuring compliance for a common approach. While uniform standards for nuclear safety and the safe management of ra-

radioactive waste may appear reasonable given the trend toward harmonization of legislation in general and liberalization of the electricity market, there are stakeholders that question interference with national prerogative. The principle that all citizens should expect the same level of safety or health throughout the EU has been an argument for greater harmonization and integration.

The Commission has challenged national authorities with its proposed directives, at a time when the integration process is slowing down. Member States may believe that energy policy belongs to them and transferring competence to Brussels is another blow to national sovereignty. Since the principle of subsidiarity became an integral part of the Maastricht Treaty and reappeared in the Treaty of Amsterdam, the pull between the Member States and the Commission over policy responsibility has been recognized and the Commission must justify the necessity of proposed legislation.⁸ States have used the principle of subsidiarity to rein in the Commission to protect their national interest. States have claimed decisions would be better made at the national level than at the Community level, challenging Commission action, if a national policy was jeopardized. One strategy is to influence the EU to adopt the national policy. However, the goal of harmonization of legislation among Member States is compromised when Member States want to protect their responsibilities for policy areas important to them. Three major issues are: 1) whether the Commission has legal competence; 2) the conflict between the goal of uniform legislation among the Member States and the policy objectives of other Member States; and 3) competition among EU institutions.

Member States tend not to support harmonization of legislation if it is detrimental to their perceived interest. The question of legal competence for energy policy and therefore nuclear safety is caught up in the bind of whether states recognized the Commission's authority agree to be subject to uniform legislation. Also at issue is the extension of Commission power vis-à-vis the Parliament and Council. The latter institutions have not been overly supportive of nuclear safety legislation.

This case is controversial not only because it pits Member States against each other, but it raises the issue of the existence or lack thereof, of an energy policy, more specifically for nuclear energy safety. Such a policy exists de facto if part of the EU promotes a particular energy source through R&D. EU Energy Commissioner, Andris Pielbags has asked the nuclear industry to address safety, cost and waste treatment issues (Financial Times, 2006). He would like states like the United Kingdom to embark on a program of building a new generation of nuclear plants.

Some stakeholders, that oppose nuclear energy, favor the legislation (e.g. Austria which is nuclear free), while others that oppose nuclear energy, oppose the legislation (FOE). To the dismay of opponents of increased reliance on nuclear energy, without solving the problems associated with terrorism and security, long-term disposal of radioactive waste and high costs including decommissioning, the proposed directives represent a green light for the nuclear energy industry. But the nuclear industry can win either way. Without a Community-wide safety standards approach, it can continue working with national authorities within each state, providing safety utilizing IAEA principles and national regulations. If the Commission increases its role within the

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scope of the proposed directives, it is likely that the nuclear option would also increase its standing in the EU. The direction the EU will take affects not only Europe but the future of nuclear energy globally. The key is to find a balance between safety prerequisites and energy supply and demand – a formidable task.

ENDNOTES

- ¹ For discussion of the future of nuclear energy in Sweden see Lofstedt (2001).
- ² For an analysis of public opinion on nuclear energy in the EU see Johnson (1999).
- ³ The lack of competency in energy policy was to be addressed in the proposed Treaty on the Constitution.
- ⁴ As part of the accession agreements Lithuania and Slovakia agreed to close some reactors. See Czech News Agency, CTK National Newswire, September 29, 2004.
- ⁵ For a fuller discussion see European Commission, “Nuclear Safety and the Environment: 30 Years of NRWG activities towards harmonization of nuclear safety criteria and requirements”, EUR 20818, November 2002.
- ⁶ For a discussion of the need for a greater Commission role in nuclear safety see, Taylor (2002).
- ⁷ For a more informative discussion of these problems, see Webster “Radioactive Waste Management in Central and Eastern European Countries”, Commission of the European Communities, EUR 1954, Brussels, July 1999.
- ⁸ For an analysis of subsidiarity see Axelrod (1994) and Van Kersbergen and Verbeek (2004).

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