

# COMMISSION

## 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)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 124 thereof,

Whereas:

- (1) The preamble to the Treaty recognises that the Member States are anxious to create the conditions of safety necessary to eliminate hazards to the life and health of the public.
- (2) Article 2(b) of the Treaty calls on the Community, in particular, to establish uniform safety standards to protect the health of workers and the general public and ensure that they are applied.
- (3) Chapter III of the Treaty lays down basic standards allowing the Community to ensure the protection of the health and safety of workers and the general public against the dangers arising from ionising radiation.
- (4) Council Directive 96/29/Euratom lays down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation <sup>(1)</sup>.
- (5) Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment <sup>(2)</sup>, calls on the Member States to 'adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, *inter alia*, of their nature, size or location are made subject to an assessment with regard to their effects.'
- (6) Ionising radiation from radioactive materials can have consequences beyond the service life of nuclear installations and beyond national frontiers.
- (7) The safety of workers and of the general public against those risks is of paramount importance to the European Communities. High safety standards should therefore be observed to guarantee that these risks are addressed during and beyond the service life of nuclear installations.
- (8) The European Parliament, the Council and the Commission have underlined <sup>(3)</sup> 'the need for Member States to ensure that adequate financial resources for decommissioning and waste management activities, which are audited in Member States, are actually available for the purpose for which they have been established and are managed in a transparent way, thus avoiding obstacles to fair competition in the energy market'.
- (9) The Commission has also noted 'the importance of ensuring that funds established for the purpose of decommissioning and waste management activities, which relate to the objectives of the Euratom Treaty, are managed in a transparent way, and used only for the said purpose. In this context, it intends, within the scope of its responsibilities of the Euratom Treaty to publish an annual report on the use of decommissioning and waste management funds. It shall pay particular attention to ensuring the full application of the relevant provisions of Community law' <sup>(4)</sup>.
- (10) In its Communication to the European Parliament and the Council <sup>(5)</sup>, the Commission noted the need for increased transparency and harmonisation in the management of these financial resources. The Commission has also expressed its intention to present a recommendation in 2005.

<sup>(1)</sup> OJ L 159, 29.6.1996, p. 1.

<sup>(2)</sup> OJ L 175, 5.7.1985, p. 40. Directive as last amended by Directive 2003/35/EC of the European Parliament and the Council (OJ L 156, 25.6.2003, p. 17).

<sup>(3)</sup> Interinstitutional statement of OJ L 176, 15.7.2003, p. 56.

<sup>(4)</sup> Commission statement of OJ L 176, 15.7.2003, p. 56.

<sup>(5)</sup> COM(2004) 719, Report on the use of financial resources earmarked for the decommissioning of nuclear power plants, 26.10.2004.

- (11) Decommissioning operations themselves can also pose potential risks to public health and the environment, particularly if the measures necessary to deal with the radiological risks of decommissioning operations are not taken in time.
- (12) In order to address all these risks, safe decommissioning of nuclear installations, including long-term management of radioactive waste and spent fuel, should be ensured.
- (13) 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 these 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 at nuclear installations in conformity with safety standards.
- (14) In accordance with the polluter-pays principle, nuclear operators should set aside adequate financial resources for the future decommissioning costs during the productive life of those installations.
- (15) In the context of the specificities of the accession negotiations, the issue of early shutdown of nuclear power reactors deemed not to be economically upgradeable was addressed. Accordingly, the Community has, on its own initiative, taken part in the raising of financial resources and provides economic support, subject to certain conditions, to various decommissioning projects in certain new Member States.
- (16) Article 26 of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, which entered into force on 18 June 2001, specifies that 'each Contracting Party shall take the appropriate steps to ensure the safety of decommissioning of a nuclear facility. Such steps should ensure, *inter alia*, that qualified staff and adequate financial resources are available.' Article 22(ii) of the Convention 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.'
- (17) Article 2(c) of the Treaty calls on the Community to facilitate investment and ensure the establishment of the basic installations necessary for the development of nuclear energy in the Community. The development of such energy cannot be dissociated from the process of the decommissioning of such investments or installations. Article 41 of the Treaty 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 <sup>(1)</sup> includes decommissioning activities as investment projects to be communicated to and discussed with the Commission. Consequently, persons and undertakings <sup>(2)</sup> should inform the Commission of decommissioning funding arrangements in respect of newly built nuclear installations.
- (18) Ensuring sufficient financial resources when needed requires a sound and prudent analysis of both the sources for such financing and the costs linked to the decommissioning of such installations. The method of determining the amounts of funding for decommissioning has to take account of technological aspects and nuclear safety constraints.
- (19) In order to ensure the availability of resources when needed for the purposes of decommissioning nuclear installations, transparent management with appropriate external supervision of such financial resources is of paramount importance; this will also help to avoid obstacles to fair competition in the energy market. Various appropriate management possibilities could be in place in order to ensure such objectives. A dedicated national body should be put in place so as to provide an expert judgment concerning fund management and decommissioning cost matters.
- (20) This Recommendation does not create derogations from State aid rules. In this context, State intervention concerns issues covered by the Treaty establishing the European Atomic Energy Community and therefore has to be assessed accordingly. However, to the extent that it is not necessary for or goes beyond the objectives of this Treaty or distorts or threatens to distort competition in the internal market, it has to be assessed under the Treaty establishing the European Community.
- (21) The manner in which these financial resources are invested should be carefully addressed so as to avoid any possible misuse. The investments should be long-term and have a secure risk profile, while at the same time providing adequate protection of the real value of the funds.

<sup>(1)</sup> OJ L 315, 9.12.1999, p. 1.

<sup>(2)</sup> Persons and undertakings engaged in industrial activities listed in Annex II to the Euratom Treaty.

- (22) With a view to ensuring safety, the gathering of appropriate resources to guarantee the decommissioning of nuclear installations should take into account the specific circumstances of certain installations.
- (23) Experience shows that exchange of information between national experts concerning the various approaches to and financial arrangements for decommissioning and waste management is an excellent way of facilitating a common response to safety challenges. In an effort to increase cooperation between the Commission and the Member States, the Commission therefore announces its intention to establish a permanent group on decommissioning funding. The Commission should be assisted by this Decommissioning Funding Group in its proceedings in the context of this Recommendation.
- (24) Without prejudice to the general principle of subsidiarity, a certain degree of harmonisation should be suggested with regard to the concepts used in decommissioning matters. Such harmonisation should be progressed through the Decommissioning Funding Group where commonly agreed interpretations of this Recommendation should be reached for its practical implementation and in particular with a view to harmonisation of methodologies for cost calculation of decommissioning activities.
- (25) The Joint Research Centre, set up on the basis of Article 8 of the Treaty, carries out research programmes in the nuclear field, which may involve ionising risks after the life service of its installations. To guarantee the safety of those installations, the Commission should ensure compliance of this Centre with the recommendations contained herein. In particular, the Commission should verify the adequacy of financing resources for the purposes of decommissioning the installations of the Centre. The Commission departments responsible for nuclear and budgetary matters are the best placed to carry out such tasks,
- (a) '*decommissioning*' shall mean all activities covering the technical decommissioning of the nuclear installation (decontamination, dismantling and demolition) and waste management (management and disposal of radioactive waste and spent fuel) leading to the release of the nuclear installations from radiological restrictions;
- (b) '*decommissioning fund*' shall mean any type of financial resources intended specifically to cover the expenditure necessary for decommissioning nuclear installations;
- (c) '*external decommissioning fund*' shall mean a decommissioning fund managed by a dedicated body independent in its decisions from the contributors to the fund;
- (d) '*internal decommissioning fund*' shall mean a decommissioning fund managed by the operator;
- (e) '*segregated decommissioning fund*' shall mean a decommissioning fund either internal or external, which is identified separately;
- (f) '*operator*' shall mean the legal person who operates the nuclear installation and has the prime responsibility for nuclear safety;
- (g) '*nuclear installation*' shall mean any civilian facility and its land, buildings and equipment in which radioactive materials are produced, processed, used, handled, stored or disposed.

## SECTION 3

## DECOMMISSIONING OF NUCLEAR INSTALLATIONS

1. All nuclear installations should be decommissioned after permanent shutdown and the management of waste should be properly addressed.
2. Decommissioning activities should be carried out without undue risk to the health and safety of workers and the general public.
3. The polluter pays principle should be fully applied throughout the decommissioning of nuclear installations. In this regard, the primary concern of nuclear operators should be to ensure the availability of adequate financial resources for safe decommissioning by the time the respective nuclear installation is permanently shut down.
4. The financial resources available should be aimed at covering all aspects of decommissioning activities, from technical decommissioning of the installation to waste management.

HEREBY RECOMMENDS:

## SECTION 1

## AIM

In view of the safety objectives of the Treaty, this Recommendation proposes measures to ensure that adequate financial resources are available at the scheduled time for all decommissioning activities of nuclear installations and for the management of spent fuel and radioactive waste.

## SECTION 2

## DEFINITIONS

For the purpose of this Recommendation, the following definitions shall apply:

## SECTION 4

**INSTITUTIONAL AND PROCEDURAL ASPECTS**

5. Without prejudice to the provisions of Article 41 of the Treaty and the Regulations in force with regards to its implementation <sup>(1)</sup>, persons and undertakings should report on the planned decommissioning funding regime in the context of the procedure provided for under Article 41 of the Treaty concerning the construction of new nuclear installations.

In the review of the proposed decommissioning funding regime the Commission will — subject to the requirements of Article 44 of the Treaty — consult the Decommissioning Funding Group.

6. Where not already provided for, Member States should set up or appoint a national body capable of providing an expert judgment on fund management and decommissioning cost matters. This body should be independent as regards the contributors to the fund.

The national body should annually review the financial resources gathered and periodically, at least every five years, the decommissioning cost estimates. Any shortfall between cost estimates and resources gathered should be addressed in good time.

Member States should report annually on the conclusions of the proceedings of the relevant national body mentioned above to the Commission.

## SECTION 5

**DECOMMISSIONING FUNDS**

7. Nuclear installations should set up adequate decommissioning funds on the basis of the revenues obtained from their nuclear activities during the designed lifetime.
8. A segregated fund with appropriate control on prudent use should be the preferred option for all nuclear installations. The review of the national body provided for in this Recommendation should play a key role in ensuring proper management and use of the funds.
9. New nuclear installations should set up segregated decommissioning funds with appropriate control on prudent use.

<sup>(1)</sup> 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 (OJ L 315, 9.12.1999, p. 1) and Commission Regulation (Euratom) No 1352/2003 of 23 July 2003 amending Regulation (EC) No 1209/2000 determining procedures for effecting the communications prescribed under Article 41 of the Treaty establishing the European Atomic Energy Community (OJ L 192, 31.7.2003, p. 15).

## SECTION 6

**ESTIMATION OF DECOMMISSIONING COSTS**

10. In view of the differences in the use of the decommissioning funds gathered, technical decommissioning of the installation, on the one hand, and waste management, on the other, should be addressed separately, on the basis of separate cost calculations.
11. In order to ensure that adequate financial resources are available, cost calculations should be based upon a prudent choice from the realistically available alternatives and subject to the external supervision and agreement of the national body foreseen in this Recommendation.
12. All cost estimates should be site-specific and based upon best available estimates.
13. If during implementation the decommissioning project proves to be more expensive than the approved cost estimates, the operator should cover the additional expenses. This aspect should be carefully addressed should the operator change during or beyond the lifetime of the nuclear installation.
14. Due attention should be paid to cases arising for historical reasons where a special solution is the most appropriate. This case-by-case approach should be transparent and with the full involvement of the national body provided for in this Recommendation.

## SECTION 7

**USE OF DECOMMISSIONING FUNDS**

15. Financial resources should be used only for the purpose for which they have been established and managed. In this context, due consideration should be given to transparency. All commercially non-sensitive information should be publicly available.
16. A secure risk profile should be sought in the investment of the assets, ensuring that a positive return is achieved over any given period of time.
17. As the operator has no influence on the financial management of an external decommissioning fund, the value of the investments should be guaranteed by the State in order to ensure that adequate funds are available when required, even if a nominal loss is made by the independent manager of the invested amounts by the time these financial resources are to be used. In such cases, the funds should not be supplemented with an amount higher than the loss in the investment.

18. If the management of an internal fund underperforms, the operator should be responsible for ensuring that adequate funds are available when needed.

absence of such a national body, Member States may request the Commission to provide advice concerning the measures to be taken.

19. In the case of nuclear installations whose main purpose is other than the sale of products or services, decommissioning should be properly planned and budgeted so as to allow adequate funding to be available for the safe and timely decommissioning of such installations.

Done at Brussels, 24 October 2006.

20. Budgetary planning should be subject to the review of the national body provided for in this Recommendation. In the

*For the Commission*  
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