COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 11.01.1999
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Proposal for a

COUNCIL REGULATION (Euratom)

defining the investment projects to be communicated to the Commission in accordance with Article 41 of the Treaty establishing the European Atomic Energy Community

(presented by the Commission)

Explanatory memorandum

Chapter 4 of the Euratom Treaty concerns investment in the Nuclear Industry. In particular article 41 of the Treaty states that investment projects shall be communicated to the Commission. Annexe II to the Treaty lists the industrial sectors for which this type of communication is an obligation. Article 43 of the Treaty states that the Commission shall communicate its 'point of view' on each project to the investor and to the Member State concerned.

To implement these provisions of chapter 4 of the Treaty two regulations have been adopted; one by the Council (Regulation No 4 of 15.109.1958) and one by the Commission for implementation of the Council Regulation (Regulation No 1 of 05.11.1958).

Council regulation No 4 contains a table with a list of industrial sectors and to each sector there correspond two limits (ceilings) expressed in money units. One ceiling has to do with new installations and the second with modifications. Any investment within any of the listed industrial sectors whose size is above the ceiling corresponding to that sector has to be declared.

The money units used in Council Regulation No 4 is the EPU (European Payment Unit). This was introduced in 1958 and has no or little relevance to any of the European national currencies of present time neither to the EURO which is expected to be introduced on the 1st of January 1999.

This problem led the Commission to search for a method to revise the ceilings and express them in EURO. This created the opportunity to study and decide if any clarification to this regulation would also be beneficial. Although this regulation is almost 40 years old and has served well up to now, it is also a fact that the state and needs of the nuclear industry today are different than what they were 40 years ago. The opportunity was taken in order to 'modernise' the regulation.

Main areas proposed for updating or clarification :

- Updating of the ceilings in order to express them in EURO and to make them more relevant to the current situation in the industry
- Clarification of the scope of certain industrial sectors in the regulation
- Suggestions to allow publication by the Commission of information of general nature on the opinions delivered.

1. The ceilings :

a) Method used for the adaptation of the ceilings from EPU to EURO units

This arithmetic conversion requires two things:

- A price index series for European nuclear industry,
- the relation of the EPU to the EURO.

None of the two is available. To complicate things even more, the definition of the EPU has changed through the years making it impossible to follow in any concrete fashion.

The definition of the EPU was made in 1957 based on a fixed amount of gold to be equal to 1 US dollar ($) which was also defined in the same way. It is reasonable to assume that it makes no real difference if the prices paid for investments in the nuclear industry were expressed in US $ or EPU's in 1958 since the exchange rate between them was fixed (1:1). Furthermore the same assumption can be made for 1997 US $ and 1997-ECU's although in this latter case the exchange rate changes. Hence one can express the 1958 EPU in 1997-ECU's through their equivalence in dollars. The equivalence in the years in between is irrelevant and may be forgotten for the purposes of changing the ceilings in the regulations. This solution also has the advantage that the price index series for the nuclear industry can be expressed in US $ and can, as such, be used for the final transformation of the ceilings in the regulations today. For this second part of the problem, an appropriately weighted mixture of price index series from the electricity generation, chemical industries and uranium supply market may

be used. No data were found to make this possible Alternatively the well-known general price index series for the dollar may be used as a last resort. Of course one can argue that the price index evolution in the US was different from the European but the US $ has been the 'global' currency after the Second World War and any evolutionary differences are at least partly reflected in the exchange rates.

Schematically, in order to connect the EPU of 1958 to the ECU of 1997 it is proposed to start from the EPU of 1958, go to the $ of 1958, use the US $ price index series to go to the US $ of 1997 and then convert to the ECU of 1997. The equvalence of the EURO to the ECU has been fixed at a rate of 1:1 by Article 2, paragraph 1 Regulation 1103/97 (OJ No L 162, 16.9.97, p. 1)

Calculation of the equivalence between the 1958-EPU and the 1997-ECU.

Assumptions:

I. Price index changes are equally reflected in the general consumer price index (CPI) of the US as in the specific nuclear industry price index of Europe (which does not exist anyway). More specifically it is assumed that the CPI acceptably reflects the price index of the US nuclear industry which should not be significantly different from the European price index for the same industry.

II. The effects of inter-European exchange rates can not be calculated with acceptable accuracy because basket definitions changed many times, new countries have since joined the union and the exchange rates continued to change throughout this period.

The CPI-U (CPI for urban consumers; the most general CPI available) is:

160.1 for 1997 (1st May)

28.9 for 1958 (year average)

1 for 1913 (the US $ data starting year)

Note: The CPI for electricity consumption for 1958 is 29.1 and for 1997 it is 130.6, an 18% difference from the general CPI-U. **(All CPI values were taken from the Bureau of Labour Statistics of the US government)**

1 EPU_{1958} = 1 $\$_{1958}$ (both based on a fixed amount of gold, 0.88867088 grams)

1 $\$_{1958}$ = 160.1/28.9 $\$_{1997}$ = 5.5397 $\$_{1997}$ hence 1 $\$_{1997}$ = 0.180512 $\$_{1958}$

1 $\$_{1997}$ = 1/1.2485 ECU_{1997} = 0.80096 ECU_{1997}

Hence 0.180512 $\$_{1958}$ = 0.80096 ECU_{1997} and finally assuming a 3% annual inflation we get

$$\mathbf{1\ EPU_{1958} = 4.4371\ ECU_{1997} = 4.71\ ECU_{31.12.98} = 4.71\ EURO_{1999}}$$

A simple multiplication by 5 will serve sufficiently well in order to transform the EPU of 1958 to EURO of 1999.

b)Other issues in relation to the ceilings.

An important factor concerning the revisions of the ceilings in the regulation is the changes in both size, structure and technology of nuclear installations. Clearly the intention of the existing regulation is to have investment declarations of projects whose size is not small but significant. Without such a filter a serious bureaucratic burden for both the industry and the Commission would be created without any obvious benefit. The ceilings for nuclear reactors, for example, referred to reactors of all kind (including research reactors) whose size was considerably smaller than power reactors built during the last two decades.

Following informal exchange of views with industry representatives and a brief look into recent investment declarations it is concluded that the ceilings must be increased by a factor larger than the '5' dictated by purely price index-exchange rate considerations in order to maintain a balance between the 'need to know' of the Commission and the usefulness of declared information. The ceilings

however should not be increased too much thus resulting in excluding important installations whose size is small but importance is high (prototype reactors for example).

c) The table under article 1 of the draft Council Regulation in annex, contains the new ceilings proposed.

2. Clarifications about activities to be declared concerning the treatment and/or storage/disposal of radioactive waste and facility decommissioning.

Item 12 of annexe II of the EURATOM treaty reads ; "Facilities for the industrial processing of radioactive waste, set up in conjunction with one or more of the activities specified in this list."

The interpretation of this has in the past led to 'disagreements' in cases where the installation was set up independently of any other installation for the treatment or storage or disposal of radioactive waste or used fuel. The importance of both of the above types of investment relative to operational safety and the environment is evident. As these installations form an increasingly important and integral part of the nuclear fuel cycle, both from the commercial-financial and public opinion points of view, it is considered safer for the potential investor to make it clear that such investments must be declared to the Commission under the provisions of articles 41-43 of the treaty.

Waste handling/storage/disposal and facility decommissioning were not at the centre of political or commercial concerns in 1958 when the nuclear industry was still in it's very early days. It is however now certain that they will play an increasingly and potentially dominant role in the developments and the future of nuclear power.

a) Waste and used fuel treatment, storage, interim storage or disposal.

Long term radioactive waste disposal may be the human activity for which the longest term effects have to be best predicted, and as such it assumes an exceptionally important status. Furthermore it is an area of an increasing research activity which might provide technical solutions for a problem considered by many to be both very difficult and serious. Allowing the Commission to keep track of the activities and developments in this area is of primary importance if co-ordinated development is to be expected. The revised draft regulation contains, under article 1, the added reference to 'interim or final storage of used fuels or radioactive wastes' thus clarifying that these activities are within the general scope of the regulation. Additionally the clarification that 'facilities for treatment, storage, interim storage or final disposal of radioactive waste or used fuels pertain to sector n° 12' was added.

b) Decommissioning of nuclear installations

The same type of argument holds for the investment projects on decommissioning of nuclear installations, an issue which is expected to dominate both the 'politics' and finances of the fuel cycle industry in the immediate and not so immediate future. Decommissioning activities are not explicitly mentioned in the list of industrial sectors and although a decommissioning operation falls logically in the category of 'conversion' by it's very nature, annexe II rather refers to 'industrial activities' leaving it open to interpretation whether for example the decommissioning of a reactor is a 'conversion' of a reactor to, say for example, an empty field. Until today no decommissioning activities have been reported. The new draft regulation contains under article 1, the added explicit reference to the general activity of 'dismantling installations'.

The Commission is currently keeping track of activities in the field of radioactive waste management in it's fourth 'Situation Report' which however contains technically oriented information rather than financial. The two (the fourth 'Situation Report' and the information to be submitted under article 41 provisions can be considered complementary.

3. Other clarifications

The following clarifications are also made in order to avoid potential differences of interpretation:

1. Any processing or by physical or chemical methods of source or special fissile materials falls under sector 4 of the regulation.
2. That de-fluorination of effluents/wastes fall under one of the sectors 4, 6, 8 and 12.
3. That investment projects below 5 million EURO need not be communicated formally following the procedure laid down in article 43 of the treaty but instead by a simplified communication of only the basic essential characteristics.

4. Publication of limited information by the Commission

The collection declarations under the provisions of articles 41-43 of the treaty form what may well be a unique data base of not only historic value but also useful in studies important in energy planning. The freedom to publish will give to the Commission the opportunity to communicate to the public its point of view on each investment. This may well prove to be beneficial for the investors who operate in an area of serious public concern. These publications will not contain any 'sensitive' data nor any data which may interfere with competition. Article four is an addition to the new draft regulation in order to allow the Commission to publish its 'point of view'.

5. Taking into account the proposed updatings and clarifications mentioned above, the Commission is proposing to the Council :

- to adopt the attached proposal for a EURATOM Council Regulation
- and, at the same time, to abrogate Regulation EURATOM n° 4 of the Council of 15 September 1958
- to circulate the present proposal to the European Parliament

PROPOSAL FOR A
COUNCIL REGULATION (EURATOM)
of .....
defining the investment projects to be communicated to the Commission in accordance with Article 41 of the Treaty establishing the European Atomic Energy Community

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the provisions of the Treaty establishing the European Atomic Energy Community (EAEC), and in particular Article 41 thereof;

Having regard to the proposal from the Commission;

Whereas, in order to attain the objectives laid down in the Treaty establishing the EAEC, the Commission must be notified of investment projects concerning new installations and of replacements or conversions involved in the industrial activities listed in Annex II to the Treaty when such projects are sufficiently extensive and are likely to have a direct influence on production, productivity or nuclear safety;

Whereas it is the responsibility of the Commission to facilitate a co-ordinated development of these investments and to make its point of view known about them,

Whereas the full establishment of the internal market requires the removal of technical barriers, the harmonisation of the construction and safety,

Whereas the investments made in the entire fuel cycle, including waste management and decommissioning, are basically necessary for the development of nuclear energy and a correct and responsible operation of the nuclear industry,

HAS ADOPTED THIS REGULATION :

Article 1

Persons or undertakings engaged in the industrial activities listed in Annex II to the Treaty establishing the EAEC shall communicate to the Commission, within the time limits laid down in Article 42 of the Treaty, their investment projects aimed at :

- creating a production capacity;
- maintaining quantitative and qualitative production capacity;
- directly increasing production capacity;
- directly increasing productivity;
- improving the quality of production;
- dismantling installations;
- management of spent fuel or radioactive waste (including treatment, interim or final storage and/or disposal);

when, in the industrial activities listed in column I, the cost exceeds the corresponding amount in column II for new installations and that in column III for replacements and conversions

	Millions of EURO	
I Sectors	II New installations	III Replacements and conversions
1. Mining of uranium and thorium ore	30	15
2. Concentration of such ores	30	15
3. Chemical processing and refining of uranium and thorium concentrates	30	15
4. Preparation of nuclear fuels, in any form	10	5
5. Fabrication of nuclear fuel elements	10	5
6. Production of uranium hexafluoride	10	5
7. Production of enriched uranium	80	40
8. Processing of irradiated fuels for the purpose of separating some or all of the elements contained therein	80	40
9. Production of reactor moderators	30	15
10. Production of hafnium-free zirconium or compounds thereof	15	7.5
11. Nuclear reactors of all types and for all purposes	50	25
12. Facilities for the industrial processing of radioactive waste, set up in conjunction with one or more of the facilities specified in this list	20	10
13. Semi-industrial installations intended to prepare the way for the construction of plants involved in any of activities 3 to 10	10	5

Preparation of nuclear fuels, in any form (sector n°4), includes chemical processing and conversion of source materials or special fissile materials.

De-fluorination processes for effluents/wastes after enrichment pertain to sectors n° 4, 6, 8 and 12.

Facilities for treatment, storage or disposal of radioactive waste or used fuels pertain to sector n° 12, even if these facilities are not located on the site of any other nuclear industrial facility mentionned in Annex II of the Euratom Treaty.

Decommissioning of any kind of installation is considered as a conversion.

Projects for new installations for nuclear reactors of any type and for any purpose and projects concerning the replacement, transformation, modernisation or power increase of such installations, where the costs does not exceed five million EURO, may be notified through a simple declaration giving only their essential characteristics; the procedure laid down in Article 43 of the Treaty establishing the EAEC need not be applied.

Article 2

For the purpose of calculating the costs referred to in Article 1 all expenditure arising directly from the carrying out of the investment projects shall be taken into account, irrespective of the time at which such expenditure is incurred.

Article 3

Communication of projects in pursuance of this Regulation shall include all the details required for the discussion provided for in Article 43 of the Treaty establishing the EAEC and in particular all the information relating to :

1. the type of products or activity and the production or storage capacity;

2. the total amount of expenditure directly chargeable to the project under consideration as well as the share of its essential components;

3. the length of time likely to be required for carrying out the project;

4. the prospects as regards supplies for and operation of the installation.

Article 4

Without prejudice to the provisions of article 44 of the Treaty establishing the EAEC, the Commission may publish the essential elements of a general nature of its opinion and the main features allowing the identification of the project, except for those elements of a commercial nature, related to intellectual property or likely to affect competition.

Article 5

This Regulation will enter into force on 1st January 1999.

It will be published in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Article 6

Regulation n° 4 of the Council of the European Atomic Energy Community of 15 September 1958 is repealed.

Done at Brussels, ...

For the Council

The President

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9