COMMISSION OF THE EUROPEAN COMMUNITIES

COM(76) 648 final

Brussels, 4 January 1977

Proposal for a COUNCIL REGULATION

on Community financial measures to promote the use of coal for electricity generation

(submitted to the Council by the Commission)

COM(76) 648 final.

.

EXPLANATORY MEMORANDUM

Need for immediate action to maintain coal-burning capacity in the Community in the 1980s

- 1.1. Electricity generation represents over 40% of the market for Community coal. To enable solid fuels to cover 16-17% of the Community's energy requirements in 1985, in accordance with the energy objectives adopted by the Council of Ministers ⁽¹⁾, electricity generation should consume around 150 m.t.c.e. in 1985 compared to some 120 m.t.c.e. in 1976. However the Commission believes that unless immediate action is taken, there is a real risk that available coal-burning capacity will so decline that coal consumption for electricity generation in 1985 will be below the 1976 level, maybe even as low as some 90 m.t.c.e.
- 1.2. The Commission does not believe that this situation can be accepted with equanimity. Development programmes for nuclear energy progress more slowly than was expected. Current forecasts of the capacity for nuclear-generated electricity in the Community by 1985 are at around 125 g.w. (of which some 35 g.w. are still subject to final decisions), as compared to the earlier Community objective of 160 g.w. by 1985 ⁽¹⁾.

1.3. Natural factors limit substantial further development of electricity generation based on hydraulic, geothermal, lignite and other sources of energy in the next few years, leaving only coal and oil as potential variables in the face of possible developments of electricity demand and nuclear generating capacity.

(1) 0.J. No. 153 of the 9.7.1975 p.2.

I

../..

1.4. Current rates of economic growth in the Community are below the historic trend but this does not justify any relaxation of efforts to reduce Community dependence on imported oil. The opportunity should be taken to reduce dependence on imported oil even further, and particularly in those Member States where such dependence is currently very high. Otherwise a recovery in economic growth rates may be imperilled by the pressure of world demand on available supply in the oil market.

2.-

- 1.5. The Commission therefore considers that action should be taken in the next few years to ensure the availability of an extra 30 G.W. of coal-fired plant capacity during the 1980's over and above that indicated by current projections. Operated at 4,000 hours per annum this represents some 120 TW.h. of electricity and the consum-ption of approximately 37 m.t.c.e. a year.
- 1.6. 37 m.t.c.e. a year represents a saving of approximately 26 m.tons of oil a year. In an emergency, by using the extra 30 G.W. to the fullest possible extent, the Community could save up to 40 m. tons of oil a year, by burning some 57 m.t.c.e. For those Member States particularly dependent on imported oil, and which are not traditionally large consumers of coal for electricity generation, this diversification of fuels will be an important contribution to the security of their fuel supplies.
- 1.7. It should also be recognised that coal represents by far the largest indigeneous Community resource (the known reserves have been substantially increased by recent large discoveries in the U.K.). The Commission therefore believes that some priority should be given to those investment projects which will make use of Community coal.
- 1.8. The Commission, in its Communication to the Council on the "State of the Community Coal Industry" ⁽²⁾, has drawn attention to the progressive deterioration in the situation of that industry.

(2) COM(76) 667 Final of the 9.12.1976.

supply

1.9.Provided suitable coal/arrangements are made sufficiently far ahead, there are no grounds for doubting that adequate supplies of coal will be available from Community and Third Country sources.

The economic costs of diversification

- 1.10. There is no clear economic incentive for individual electricity undertakings to be in the vanguard of increased reliance on coal. It is true that world prices of steam coal are likely to remain attractive since the world price for coal would normally move roughly in step with world oil prices, or may even rise at a slower rate. But the inherent technical requirements of coal-fired installations result in construction costs some 20% above those of comparable oil-fired installations and in higher non-fuel operating costs.
- 1.11. In some Member States the particular economic circumstances of today make it difficult to make available the additional finance necessary whether by grants or subsidies from the public sector budget, or by increases in the prices charged for electricity. The problem is aggravated by the fact that the current excess of refinery capacity and the mismatch of the pattern of product demand and supply have created short-term price movements, which do not closely reflect world prices for crude oil. However, such shortterm price movements should not be allowed to obscur likely longterm price movements.
- 1.12. The Commission therefore believes that an effort should be made by the Community as a whole, to influence the decisions of individual electricity enterprises in favour of the provision of additional coal-burning capacity, in addition to the efforts made by each Member State.

••/••

3.-

Examination of possible courses of action

2.1. Following the guidelines agreed by the European Council at its Rome meeting in December 1975, the Commission set out ³⁴ possible measures for encouraging the continued and increased use of coal in power stations. The position of the present proposal in the context of these possibilities can be understood by considering each one in turn as follows:

Requiring the electricity producers to build more coal-burning power stations (if necessary with financial assistance).

2.2. A mandatory obligation of this type clearly involves the intervention of the Member States'governments and the setting of coal-burn targets for each country as well as having repercussions on the whole of the energy market. These aspects in turn are closely associated with the fuel prices in the different Member countries and it is felt that such an approach would at this time be premature in the absence of agreement on an energy pricing policy embracing all fuels.

The Commission now proposes, as an interim measure until such time as agreement on energy pricing policy can be hoped for, a Community scheme to give financial assistance on a case by case basis to individual undertakings, linked to an obligation for them to burn coal in conformity with a seven-year coal-burn plan. The proposal is described in greater detail below.

Doc. COM(76) 20 of 16.1.1976 "Implementation of the Energy Policy Guidelines crawn up by the European Council at its meeting in Rome on 1 and 2 December 1975".

Ensuring the competitivity of coal compared with fuel oil by means of guarantees and (if necessary) subsidies on consumption

- 2.3 The Commission has carefully considered this possible course of action, and has examined financial aid mechanisms existing in the four coal producing member states, designed to secure the contribution of these more expensive indigenous coals to the primary energy market of the electricity generating industry. These fall into two categories :
 - coal is sold to power stations at market prices for alternative sources of primary energy and the coal industry is compensated for any resultant losses through government subsidies. This system is currently applied in Belgium and France and has been applied in the U.K. in the past, the last occasion being in 1973/74.
 - coal is sold to power stations at list prices covering costs of production, coal producers receiving no subsidies. Insofar as these prices are above the market prices of alternative forms of primary energy, the difference is reimbursed to the electricity producer, either through a government subsidy, or through passing the extra costs to the electricity consumer. This system currently applies in Germany.

In no Member States are subsidies related to power station coal originating from third countries.

2.4 The common feature of these approaches is that they are extremely costly. An example of the order of these costs can be obtained from the expected cost of the German system in 1976 of DM 1 500 million. The Commission considers that the application on a Community basis of any approach similar to those above would only be logical or acceptable in the context of Community agreement on an energy pricing policy. Such an approach is therefore a possibility to be considered in the future but which is presently premature.

- 5 -

2.5 The Community is currently examining the possibilities of guarantee measures in the context of work on the encouragement and fuel promotion of indigenous/resources but it is unlikely that these can be translated into agreement on a Community basis in the immediate future.

Encouraging modifications to refineries to reform surplus fuel oil into middle and light products

2.6 This is part of current Commission and oil industry policy. However, the investments required are very expensive and will require several years to achieve. They will have an effect in the 1980s of reducing the amount of fuel oil from Community refineries which is in competition with coal.

Elements of the Commission Proposal

- 3.1 The Commission proposes that Community funds should be made available to provide inducements to the Community's electricity producers to put some 30 GW of additional modern coal-fired capacity into operation by the early 1980s through the provision of grants towards the capital cost* of the relevant installations. The Commission believes that a limited number of grants, which would cover 30% of that part of the capital investment in coal-fired electricity generating installations which is exclusively related to the ability to burn coal, will provide the necessary inducement.
- 3.2 The proposal contains an important competitive element related to the allocation of the available funds. This competitive element resides in the principle that available funds will, in the absence of overriding considerations to the contrary, be made available for those projects which result in the largest coal-burn in relation to the size of the respective grants and thus in the biggest oil saving.
- 3.3 To enable this principle to be implemented, undertakings applying for grants must submit a coal-burn plan for the first 7 years of full operation of the installations partly financed by them. The Commission will maintain control over the fulfilment of coal-burn plans by paying only 30% of each grant during construction and the rest in equal annual instalments during the first 7 years of full operation, subject to adherence to the plan.

*For calculation purposes, construction costs of an oil-fired power station due to come into operation around 1980-81 are currently reckoned at 1976 prices to be around 350 u.a. per KW installed capacity, and at around 420 u.a. per KW for a coal-fired plant, a différence of 70 u.a. Per 1 GW (1 000 MW) the difference thus amounts to some 70 m.u.a. The cost of modernization or adaptation to coal-firing capability, such as for the provision of coal handling equipment for plant with boilers designed for dual oil/coal firing but lacking the ancillary equipment, are substantially lower and differ from case to case.

- 7 -

- 3.4 The proposal clearly specifies those types of investment for which financial support is appropriate. These are the construction of new power stations having a capability of operating exclusively on coal, the conversion of existing installations which lack certain auxiliary or logistic support equipment to enable coal to be burned and the modernization of existing coal-burning power stations which would otherwise be withdrawn from service. The proposed support will relate only to those aspects of investments directly and exclusively related to the creation of coal-burning capacity for the production of electricity.
- 3.5 The priority will also be influenced by the Commission's view of the extent to which the coal-burn plan represents coal burn which is effectively additional to the current total coal burn of the undertaking.
- 3.6 Whilst the proposal is not confined to the use of coal of Community origin in line with the Community objective of reducing dependence on imported oil, the importance of the Community's indigenous coal resources must not be discounted. It is therefore appropriate, in the operation of the priority approach indicated above, to give some advantage to those projects which will use exclusively Community coal, and the Commission intends to apply the priority considerations in such a way as to ensure some advantage in priority for such projects.
- 3.7 The Commission believes that through the application of the competitive coal-burn conditions, coupled to payment by instalments, it will be able to finance 30% of approx. 30 GW of additional modern coal-fired electricity generating capacity to come into operation by the earry 1980s for a total expenditure of 500 m.e.u.a. spread over 12-15 years, with maximum annual expenditure of 50 m.e.u.a. This enables the Commission to ensure that Community funds are expended at a rate commensurate with the objective to be achieved.

- 8 -

- 3.8. The remaining 70% of the additional cost must of course be found by the enterprise either from the revenues obtained by the sale of electricity or by virtue of transfers from the public budget. The Community scheme does not, therefore, replace national effort, but acts so as to reinforce and encourage it.
- 3.9. The Commission proposes that the funds should be made available through the budget of the Communities. In view of the multiannual character of the proposed actions the provision will also carry commitment authorisation. As the purpose of these grants is to reduce the Community's dependence on imported oil for electricity generation through promotion of the use of both Community and Third Country coal in power stations, and the grants would be made directly to the electricity undertakings, the funds will be provided under the EEC Treaty.
- 3.10. This scheme will be complementary to the existing financial mechanisms which support, at a Community level, investment in power stations. In particular, there are the loan facilities and interest rebates available under the E.C.S.C. Treaty and the General Loan facilities offered by the European Investment Bank. It is to be examined as to whether additional inducements for the construction of coal-fired power stations through 3 percent interest rebates can be provided from the Community budget during the first five years of such ECSC and EIB loans.
- 3.11. The Commission will be exploring ways to develop these instruments further, but believes that their full potential cannot be realised in the short term, before there has been much more progress towards an energy pricing policy and towards a Community policy for encouraging and promoting indigeneous fuel resources.
- 3.12. A system of capital grants is particularly attractive for projects involving the conversion or modernisation of existing power stations, since, in those circumstances, it can represent 30% of the total outlay. Such projects, because of their lower capital cost in relation to the increase in capacity, would be favourably placed in a competitive situation for the allocation of funds. The effect of such projects would generally be more immediate than for new installations. It is expected that at least half the available funds will be used to support such projects.

Proposal for a

REGULATION OF THE COUNCIL

on Community financial measures to promote the use of coal for electricity generation

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community and in particular Article 235 thereof; Įδ

Having regard to the proposal from the Commission;

Having regard to the Opinion of the European Parliament;

Having regard to the Opinion of the Economic and Social Committee;

Whereas the establishment of a common energy policy is one of the objectives which the Communities have set themselves and whereas it is for the Commissio to propose the measures to be taken to that end;

Whereas the Council Resolution of 17 December 1974 decided that the pattern of energy consumption should be altered by progressively increasing the use of reliable energy sources and that the consumption of oil should be restricted where it can be economically replaced by other energy sources;

Whereas the Council Resolution of 13 February 1975 approved the guidelines of electricity supply programmes based chiefly on nuclear energy with coal as the principal alternative and cites Community provisions to restrict the use of oil and gas in power stations;

Whereas in the absence of substantial new investment in coal-fired electricity generating capacity, partly to replace obsolete plant, a massive undesirable increase in oil consumption for electricity generation in the Community will be inevitable from 1980 onward;

Whereas likewise the need to support Community coal production as far as this can possibly be done;

- 2 -

Whereas hesitations by electricity producers to make investment decisions in favour of coal-fired electricity generating capacity so that this will be available by the early 1980s give grounds for concern;

Whereas the Commission believes that relatively modest financial inducements will cause a substantial number of investment decisions in favour of coalfired electricity generating capacity to be brought forward so that it will be available by the early 1980s;

Whereas such coal-fired generating capacity should be operated to the maximum practical extent using both Community and third country coal to reduce oil consumption for electricity generation;

Whereas the Treaty does not provide the powers necessary for the introduction of Community financial measures to reduce dependence on oil for electricity generation;

HAS ADOPTED THIS REGULATION :

٢ſ

Article 1

The Commission may provide financial aid toward investments in electricity generation in the public or private sectors within the limits of the funds made available in the budget. These financial aids will be available for :

- construction of electricity generating installations capable of operating wholly on coal as a primary fuel
- conversion of generating installations incapable of operating on coal to enable them to operate wholly on coal as a primary fuel, including the provision of necessary ancillary equipment

modernization of generating installations capable of operating wholly on coal as a primary fuel which will be 25 years or older in 1980. 12

The term coal in this Regulation refers to hard coal of whatever origin with a minimum calorific value of 4 500 kcal/kg.

The above financial support shall only be available where the project results in an effective capacity of not less than 100 MW.

All projects on which construction work commences after this Regulation has been adopted by the Council may form the subject of an application for a grant under this Regulation. Projects on which construction work has started at an earlier date will not be eligible.

Article 2

The grants will cover 30% of the additional capital costs which the Commission considers to arise wholly and necessarily from providing the generating installation with a coal-firing capability as compared with, or in addition to, an oil-firing capability, or arising from modernization of the relevant equipment.

Grants will be accorded on the basis of the Commission's assessment of the estimate referred to in Article 3 submitted with the application and will be expressed in european units of account at the rate of exchange with the national currency of the member state concerned on the date on which the application for the grant is submitted to the Commission. Grants thus expressed in european units of account will remain unaffected by subsequent financial developments such as changes in costs or in rates of exchange between european units of account and the national currency of the member state concerned.

5

Article 3

Applications for grants must include the following particulars :

- 1. Technical information relating to the capacity and operating conditions of the installation, an adequate description of the technical details of the equipment and information on the type and source of the coal to be used.
- 2. A programme indicating the expected progress of construction, and in particular the expected date of commencement of full operation of the installation.
- 3. Estimates of the total cost of the project, together with detailed specifications of the equipment and of costs relating exclusively to the use of coal as a fuel, such as equipment for:
 - a) coal burning
 - b) coal delivery, handling and stocking
 - c) ash and dust handling and disposal
 - d) environmental protection measures
 - e) control
- 4. A detailed summary of the additional capital costs incurred due to the use of coal as a fuel compared with, or in addition to, the use of oil.
- 5. Where the project relates to the modernization of existing installations, in addition to the above information, estimates of the expected effective working life of the power stations before and after modernization.

Article 4

5 -

Applications for grants must be accompanied by a plan showing minimum annual quantities of coal expressed in t.c.e. (tonnes of coal equivalent) to be burned during the first 7 years of full operation of the installation.

Article 5

In considering applications for grants, the Commission is to be guided, by the coal-burn plans submitted to the effect that the higher the proposed coal-burn in relation to the amount of the grant, the higher the priority of the project. However, priority is to be given to projects in regard to which the electricity undertaking is prepared to commit itself to use principally Community coal.

Article 6

The Commission will adopt implementing provisions for this Regulation and in particular for the submission of applications for grants under Article 3 of this Regulation and will draw up a standard form of contract to conclude with the undertakings to benefit from grants.

This standard form of contract shall include the following conditions relating to the payment of grants :

- Grants will be payable in 10 equal instalments, 3 of these prior to the installation coming into service and the remaining 7 annually thereafter subject to fulfilment of the coal-burn plan in Article 4.
- The first 3 instalments may be repayable to the Commission in the event of the installation not commencing operation within a period to be specified in the contract.

- The 7 annual instalments may be reduced or withheld in the event of the coal-burn plan not being fulfilled.

Article 7

All relevant technical and financial information requested by the Commission relating to all stages of a project for which grants are requested under this Regulation shall be made available to the Commission throughout the period of the payment of grants. The Commission shall have the right to verify this information by inspection.

Article 8

The Commission will make a report at regular intervals on the execution of this Regulation and will communicate it to the Council and to the European Parliament.

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

Done at Brussels

°15

For the Council

For the President

FINANCIAL STATEMENT

. Part 1 : INTERVENTION APPROPRIATIONS

- 1) Relevant budgetary heading code . . .
- 2) Title of the budget heading: "Community Financial Measures to promote the use of Coal for Electricity Generation"
- 3) Legal basis Art. 235 EEC Treaty
- 4)4.1. Description : Grants, which are not repayable, towards the higher capital costs of installations for electricity generation based on coal instead of oil. The grants are conditional on the achievement of predetermined levels of coal-burn, using coal of any provenance, during the first 7 years of operation.
- 4)4.2. Objectives : To promote the construction of 30 GW of additional coalfired electricity generating capacity to come into operation at the latest by the early 1980s with a view to keeping the Community's rising dependence on imported oil for electricity generation in check.
- 4)4.3. Justification : With normal usage, the proposed 30 GW of coal-fired generating capacity are expected to save about 26 m.t. of oil a year. With maximum usage in an emergency, they will permit a saving of around 40 m.t. of oil a year.

5) Financial Implications of the Project

5)0. Expenditure : The total cost of this action will not exceed 500 m.e.u.a. This sum is to be expended over a period of up to 15 years at a maximum rate of 50 m.e.u.a. in any one year. In view of the multiannual character of these actions it will be necessary to enter into contractual obligations at the beginning of the various contracts for the total sum necessary to the <u>completion</u> of the projects accepted for grant.

16

It is expected that in the first few years the payment appropriations will be less than the ceiling of 50 m.e.u.a. which will be attained after the initial period. Similarly, the level of payments is likely to diminish towards the end of the period envisaged for this action. It is not expected that this action will begin before 1978.

5)0.2. Method of calculation : The difference in the capital cost of coal as against oil-fired electricity generation is reckoned at 70 m.e.u.a. per GW installed capacity. The costs of providing certain existing oil-fired capacity with coal-fired capability vary from case to case and can be very substantially lower.

It is proposed to reimburse 30% of the capital costs specifically arising from the provision of coal-firing capability. By financing a mixture of new and of adaptation projects, the aim is to achieve an average of about 55 m.e.u.a. per GW to qualify for Community aid. 30% of 55 m.e.u.a. are 16.5 m.u.e.a. per GW to be applied to 30 GW, thus arriving at approximately 500 m.e.u.a.

6) Type of control to be provided

The payments made will be subject to the normal controls made by the Commission in conformity with the financial regulations in force.

The grants made will be subject to frequent controls in conformity with Articles 6 and 7 of the basic regulation.

B. Part 2 : ADDITIONAL DATA TO BE PROVIDED FOR A NEW PROJECT

- 7) Overall cost will not exceed 500 m.e.u.a. Expected duration up to 15 years.
- 3A grade part-time with administrative and secretarial assistance.
 No additional staff.
- 9) Project is financed from the budget of the Communities.

- 2 -