

# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(89) 332 final

Brussels, 18 September 1989

Draft

## COUNCIL DIRECTIVE

concerning a Community procedure to improve the transparency  
of gas and electricity prices charged to industrial  
end-users

---

(presented by the Commission)

## EXPLANATORY MEMORANDUM

---

1. As announced in its communication to the Council on the transparency of energy prices (COM(89)123 30 March 1989), the Commission now transmits a proposal for a Council Directive concerning a Community procedure to improve the transparency of natural gas and electricity prices charged to industrial end-users.

The point of departure for this proposal has been the fact that gas and electricity price transparency is not satisfactory in the Community's industrial market and puts in danger the realization of the internal energy market.

2. In order to assist the Commission in finalizing the technical aspects of the system for gathering and communicating prices, the Commission has appointed a select group of experts with balanced representation of gas and electricity companies on the one hand and industrial users, both small businesses and large firms, on the other.

Except for its first and last meetings which were in plenary, the group held meetings from 27 April to 15 June 1989, in separate subgroups on gas and electricity.

3. The intensive work carried out by both subgroups in a spirit of full cooperation has allowed the Commission to draw up the two technical annexes to the draft Directive.

1. Gas: The technical annex to the draft Directive defines the method which will be used, which is based on that used by the SOEC in its gas price surveys. It identifies seven "standard" users most representative of the industrial gas market. It lays down the frequency and deadlines for transmitting data, the places where the prices will be recorded, and the method of calculating them. It determines the elements ensuring an accurate reflection of the system of price formation.

2. Electricity: The technical annex to the draft Directive adopts the method of standard type used by the SOEC in its electricity price surveys and extends it to cover industrial users up to a rated capacity of 10 MW.

For users above 10 MW a new system has been introduced, based on a marker price, including private generators.

The marker price is accompanied by a series of price abatement factors (in principle 6%, 8% and 10%) selected among the factors used in practice in the category of industrial user in question.

Independent statistical processing bodies will supply the highest and lowest prices recorded in the regions served by several distributors.

Every two years the distributors or the independent statistical processing bodies will supply statistics on the number of users and their consumption for each category of quantity or capacity. This information, which is for the Commission's use, will not be published.

4. The draft Directive is based on Article 213 of the EEC Treaty, and is based on the following essential features:

- no breach of the confidentiality of contracts,
- transmission of up-to-date price data every six months, on 1 January and 1 July of each year,
- publication of prices by the Commission (through the SOEC) no later than five months after the surveys.

Within the Commission, the SOEC will be charged with the receipt, control and publication of the information provided for in the first Article of the Directive.

Draft

COUNCIL DIRECTIVE

concerning a Community procedure to improve the transparency  
of gas and electricity prices  
charged to industrial end-users

---

THE COUNCIL OF THE EUROPEAN COMMUNITIES;

Having regard to the Treaty establishing the European Economic Community, and in particular Article 213 thereof,

Having regard to the Commission's draft,

In cooperation with the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas energy price transparency, to the extent that it reinforces the conditions ensuring that competition is not distorted in the Common Market, is essential to the achievement and operation of the internal energy market;

Whereas transparency can help to obviate discrimination between users, by increasing their freedom to choose between different energy sources and different suppliers;

Whereas, at present, the degree of transparency varies from one energy source and one Community country or region to another, thus calling into question the achievement of an internal energy market;

Whereas, however, the price paid by industry in the Community for the energy which it uses is one of the factors which influence its competitiveness and should therefore remain confidential;

Whereas the system of standard consumers used by the Statistical Office of the European Communities (SOEC) in its price publications and the system of marker prices due to be introduced for major industrial electricity users will ensure that transparency is not an obstacle to confidentiality;

Whereas it is necessary to extend the consumer categories used by the SOEC up to the limits at which the consumers remain representative;

Whereas in this way the objective of end-user price transparency would be achieved without endangering the confidentiality of contracts; whereas in order to respect confidentiality, it is necessary that at least 3 consumers exist in a given consumption category to be able to publish a price;

Whereas the information in question relates exclusively to the gas and electricity consumed by industry for energy end-uses;

Whereas the undertakings which supply gas and electricity as well as the industrial gas and electricity consumers remain - independently of the application of the present Directive - subject to the Treaty's competition rules; whereas consequently the Commission, in the framework of the powers of application of Council Regulation No 17<sup>1</sup>, as last amended by the Act of Accession of Spain and Portugal, can require communication of prices and conditions of sale, to the extent that this becomes necessary to ensure compliance with the prohibitions decreed by Articles 85 and 86 of the Treaties;

Whereas knowledge of the price systems in force forms part of price transparency;

Whereas knowledge of the distribution of categories of consumers and their respective market shares also forms part of price transparency;

Whereas, the communication to the Commission of prices and conditions of sale to consumers, accompanied by the price systems in operation as well as the distribution of consumers by consumption category, is to enable the Commission to be informed in order for it to decide, as necessary, on appropriate action or proposals in the light of the situation of the internal energy market;

Whereas the data supplied to the Commission will be more reliable if the companies themselves establish this data;

---

<sup>1</sup>OJ No 13, 21.2.1962, p. 204/62.

Whereas it must be possible to check the reliability of the data supplied to the Commission;

Whereas transparency can be achieved by publicizing data and by calculating the prices and price systems as widely as possible among end-users;

Whereas to implement energy price transparency the system should be based on the proven expertise and methods developed and applied by the SOEC regarding the processing, checking and publication of the data;

Whereas, with the prospect of the achievement of the internal market in energy, the system of transparency should be rendered operational as soon as possible,

HAS DECIDED AS FOLLOWS:

#### Article 1

Member States shall take the steps necessary to ensure that the undertakings which supply gas or electricity to final industrial consumers, as defined in the Technical Annexes I and II, communicate to the Commission in the form provided for in Article 3:

1. gas and electricity prices and sales conditions for industrial end-users,
2. the price systems in use,
3. the distribution of consumers and the corresponding volumes by category of consumption.

#### Article 2

1. The undertakings referred to in Article 1 shall assemble the data provided for in Article 1, points 1 and 2, on 1 January and 1 July of each year. This data, drawn up in conformity with the provisions of Article 3, shall be sent to the Commission and the competent authorities of the Member States within two months.
2. On the basis of the data referred to in the first paragraph the Commission shall publish each May and each November, in an appropriate form, the prices of gas and electricity for industrial end-uses in the Member States, and the pricing systems used to that end.

3. The information provided for in Article 1, point 3, shall be sent every two years to the Commission. The first communication shall concern the situation as of 1st January 1990. This information will not be published.

### Article 3

The implementing provisions concerning the form, content and all other features of the information provided for in Article 1 are set out in Annexes 1 and 2.

### Article 4

The Commission shall not disclose data supplied to it pursuant to Article 1 and covered, by its nature, by the obligation of professional secrecy.

This provision shall not prevent the publication of such data in an aggregated form which does not allow the identification of individual commercial transactions.

### Article 5

When the Commission notes anomalies or inconsistencies in the data submitted under the present Directive, it may ask the Member States to allow it to inspect the appropriate disaggregated data supplied by undertakings as well as the methods of calculation or evaluation upon which the aggregated data is based, in order to understand, or even amend, any information deemed irregular.

### Article 6

Where a specific problem is identified that can be corrected by a simple technical adjustment to the corresponding annex, the Commission shall make the necessary changes. Such changes shall apply to the technical elements only and may under no circumstances affect the general system of the method.

### Article 7

Once a year the Commission shall present a summary report on the operation of this Directive to the European Parliament and the Economic and Social Committee.

Article 8

Member States shall adopt the laws, regulations and administrative provisions needed to comply with this Directive no later than 1 July 1990.

The provisions adopted pursuant to the first paragraph shall make express reference to this Directive.

Article 9

This Directive is addressed to the Member States.

Done at Brussels,

For the Council  
The President

Annex I: Description of the data concerning prices and sales conditions requested for gas.

Annex II: Description of the data concerning prices and sales conditions requested for electricity.



Technical Annex on Gas

1. Two types of gas are concerned:
  - (i) natural gas
  - (ii) town gas
2. When these two types of gas are distributed in the same urban area or region data should be reported for both except where the consumption is not significant (less than 10%).
3. Only piped distribution is considered.
4. Prices to be reported are not city gate prices paid by gas distributors but prices paid by the end-consumer for supplies delivered usually by distribution companies but also in some cases, by production or transmission companies.
5. Uses considered are all industrial uses.
6. Excluded from the system are gas consumers with consumption:
  - a) for electricity generation in public power plants,
  - b) in non-energetic uses (e.g. in the chemical industry),
  - c) above 4 186 000 GJ/year (= 1 163 GWh/year).

7. Prices recorded are based on a system of standard consumers defined basically by the level and the modulation<sup>(1)</sup> (or load factor) of the gas consumption.
8. The other characteristics which could play a part in the price setting (e.g. interruptibility) will be determined in every case, always adopting the solution which is most frequent in practice.
9. Prices must include meter rental, the standing charge and the commodity rate. They do not include the initial installation charge to the consumer.
10. The following industrial standard consumers, coded I<sub>1</sub> to I<sub>5</sub>, have been chosen:

	Annual consumption		Modulation	
I <sub>1</sub>	418.60 GJ or	116 300 KWh	no load factor laid down <sup>1</sup>	
I <sub>2</sub>	4 186 GJ or	1 163 000 KWh	200 days	
I <sub>3-1</sub>	41 860 GJ or	11.63 GWh	200 days 1 600 h	
I <sub>3-2</sub>	41 860 GJ or	11.63 GWh	250 days 4 000 h	
I <sub>4-1</sub>	418 600 GJ or	116.6 GWh	250 days 4 000 h	
I <sub>4-2</sub>	418 600 GJ or	116.3 GWh	330 days 8 000 h	
I <sub>5</sub>	4 186 000 GJ or	1 163 GWh	330 days 8 000 h	

<sup>1</sup> If necessary 115-200 days

(1) the daily load factor is the number of days which would be required to take the entire annual consumption at the maximum daily offtake rate:  $nd = \frac{Q_a}{Q_d \text{ max}}$

the hourly load factor is the number of hours which would be required to take the entire annual consumption at the maximum hourly offtake rate:  $nh = \frac{Q_a}{Q_h \text{ max}}$

In the above formula:

Q<sub>a</sub> = annual volume consumed

Q<sub>d</sub> max = maximum daily offtake

Q<sub>h</sub> max = maximum hourly offtake

11. Prices are to be recorded in the following places or regions:

Belgium:	Brussels;
Denmark:	Copenhagen;
FR of Germany:	Hamburg, Hannover, Weser-Ems, Dortmund, Düsseldorf, Frankfurt/Main; Stuttgart, Munich;
Spain:	Madrid, Barcelona, Valencia, North & East;
France:	Lille, Paris, Strasbourg, Marseille, Lyon, Toulouse;
Ireland:	Dublin;
Italy:	Milan, Turin, Genova, Rome, Naples;
Luxembourg:	Luxembourg city;
Netherlands:	Rotterdam;
Portugal:	Lisbon
United Kingdom:	London, Leeds, Birmingham;

12. Prices recorded are prices based on the tariffs, contracts, conditions and rules in force at the beginning of each six-month period (January and July) including any eventual rebates.

13. If there are several possible tariffs, it is the tariff which is most advantageous to the consumer that is taken into account, after the elimination of the tariffs which are not used in practice or which apply only to a negligible number of users.

14. When there are only quasi-tariffs, special contracts or freely-negotiated prices, the most commonly found price (most representative) for the given supply conditions has to be recorded.

15. Prices have to be expressed in national currency by physical unit of gas<sup>(2)</sup>. The unit of energy used is measured on the basis of the gross calorific value (GCV), as is the practice in the gas industry.

(2) In case the m<sup>3</sup> would be used, it would be necessary to define its energy content in GJ, KWh or therm.

16. Two price levels are to be shown: (3)

- the price net of tax;
- the price excluding recoverable VAT but including all other taxes.

17. The level of taxes (excluding recoverable VAT) should be indicated as well as an explanation of their application.

18. An explanation, as detailed as necessary to accurately reflect the system of price formation, must be annexed. Special emphasis shall be given to any modifications since the previous survey.

19. In Member States where one gas company covers virtually all the industrial sales for that country, the information should be collected by that company. In other Member States where one or more of the regions is served by more than one gas company, the information should be collected by an independent statistical body.

---

(3) The price excluding tax is obtained directly from the tariffs or the contracts. The price excluding recoverable VAT includes, where payable, other specific taxes.

## ANNEX II

### Technical Annex on Electricity

With respect to the reporting of information relating to electricity under this Directive, the following shall apply:

I. The "Typical Reference Consumer" Survey, (for Consumers with up to 10 MW Maximum Demand).

1. The existing survey of electricity prices for typical reference consumers in the Community carried out by the Commission shall be extended to include two categories of industrial reference consumer with a maximum demand of 10 MW, and the whole survey of industrial consumers, (as described below) shall be incorporated in this Directive.
2. Electricity prices in Member States with a unified national tariff shall be surveyed in one location only and for Member States with tariffs which vary across the country, prices shall be surveyed in a representative sample of locations, as follows:

Belgium	: The country as a whole.
Federal Republic of Germany	: Hamburg, Hanover, Dusseldorf, Frankfurt am Main, Stuttgart, Munich, Western Zone, Southern Zone.
Denmark	: Copenhagen (KB), North Zealand (NESA).
Spain	: Madrid.
France	: Lille, Paris, Marseille, Lyon, Toulouse, Strasbourg.
Greece	: Athens.
Ireland	: Dublin.
Italy	: Northern and Central Italy, Southern Italy and the Islands.
Luxembourg	: Grand Duchy (Cegedel).
Netherlands	: Rotterdam (GEB), North Holland (PEN), North Brabant (PNEM).
Portugal	: Lisbon.
United Kingdom	: London, Glasgow, Leeds, Birmingham.

3. Electricity prices shall be surveyed for the following nine categories of typical reference industrial consumer:

Reference Consumer	Annual Consumption kWh	Maximum Demand kW	Annual utilisation, hours
la	30 000	30	1 000
lb	50 000	50	1 000
lc	160 000	100	1 600
ld	1 250 000	500	2 500
le	2 000 000	500	4 000
lf	10 000 000	2 500	4 000
lg	24 000 000	4 000	6 000
lh	50 000 000	10 000	5 000
li	70 000 000	10 000	7 000

The maximum demand is the maximum offtake in any quarter of an hour recorded in one year, expressed in kW. The price of supply is calculated for  $\cos \phi = 0.9$ . In the case of tariffs based on half hourly maximum demand, the maximum demand of the reference consumer is multiplied by a coefficient of 0.98. In the case of tariffs based on a maximum demand expressed in kVA an adjustment is made by dividing the reference consumer's maximum demand in kW by the coefficient  $\cos \phi = 0.90$ .

4. In the case of tariffs based on maximum demand readings more frequent than once a year the capacity charge is multiplied by the following coefficients:

Table of power correction coefficients

Utilisation (hours)	Monthly Maximum Demand	Two Monthly Maximum Demand	Quarterly Maximum Demand	Average of 3 highest monthly Maximum Demands	Average of 2 highest monthly Maximum Demands	Annual Maxim. Demand
1 000	0.81	0.83	0.86	0.94	0.96	1.0
1 600	0.83	0.85	0.88	0.95	0.97	1.0
2 500	0.85	0.87	0.90	0.96	0.98	1.0
4 000	0.90	0.91	0.95	0.98	0.99	1.0
5 000	0.90	0.91	0.95	0.98	0.99	1.0
6 000	0.96	0.97	0.98	0.99	0.995	1.0
7 000	0.96	0.97	0.98	0.99	0.995	1.0

5. For tariffs with reductions for "off-peak" periods the following "off-peak" consumptions should be assumed in calculating the average price per kWh:

Standard consumer	Annual utilization	Annual Consumption	Annual Consumption (In 1 000 kWh) charged at off-peak rates according to the average daily duration of off-peak periods in each 24 hours					
	hours		1000 kWh	7 h	8 h	9 h	10 h	11 h
la	1 000	30	0	0	0	0	0	0
lb	1 000	50	0	0	0	0	0	0
lc	1 600	160	11	13	16	19	22	25
ld	2 500	1 250	197	225	262	300	338	375
le	4 000	2 000	438	500	580	660	740	820
lf	4 000	10 000	2 190	2 500	2 900	3 300	3 700	4 100
lg	6 000	24 000	7 140	8 160	9 120	10 080	11 040	12 000
lh	5 000	50 000	13 100	15 000	17 000	19 000	21 000	23 000
li	7 000	70 000	23 300	26 600	29 400	32 200	35 000	37 800

For off peak periods of durations between those shown above, the annual consumption of off-peak kWh's should be estimated by interpolation. For any further off-peak periods, for example all day Sunday, only half of the extra hours should be taken and these hours averaged across all days of the year, and the result added to the normal off-peak period, before using the table above.

6. Wherever possible, the price reported should be based on a published tariff applicable to the reference consumer category in question. If there are several possible tariffs, the tariff which is the most advantageous to the consumer, after the elimination of any tariffs which are not used in practice or which apply only to a marginal or negligible number of users, should be applied. Where there are only quasi-tariffs, special contracts, or freely negotiated prices, the most commonly found price, (most representative) for the given supply conditions should be reported.
7. Where electricity for a given reference consumer category may be supplied at a variety of voltages, that voltage should be assumed which is the most representative for the reference consumer category in question. This principle should be applied to other parameters not specified in this Directive.
8. The price per kWh should be calculated so as to include all fixed charges payable, (e.g. meter rental, fixed charges or capacity charges, etc.), as well as the charges for the kWh's consumed. It is therefore the total amount payable after any premiums or rebates, for the consumption pattern in question, divided by the total consumption. Initial connection charges, however, should not be included. Although information is to be provided twice yearly, the calculation should be based on annual consumption figures, to avoid seasonal variations.

9. Prices should be given in national currency per kWh:

- with all taxes excluded
- with all taxes included, (except recoverable VAT).

The rates and method of application of taxes, which should include any tax whether national, regional or local, levied on electricity sales to the consumer, should be reported.

10. An explanation as detailed as necessary to accurately describe the tariff system and how it is applied should be given. Any modifications in the system since the previous survey should be given special prominence.

**II. The "Marker Price" Survey, (for Consumers above 10 MW Maximum Demand).**

11. To survey industrial consumers with maximum demands above 10 MW, a new system based on "Marker Prices", as defined below, shall be introduced.

12. For all Member States except the Federal Republic of Germany and the United Kingdom, variations in the structure of charges and prices charged for large industrial electricity consumers across the country are relatively small, and Marker Prices and associated information shall be collected and published for the Member State as a whole. For the Federal Republic of Germany and the United Kingdom there may be significant geographical variations and so information for these two Member States shall be collected and published by three regions in each case, as follows:

<u>Member State</u>	<u>Regions*</u>
Federal Republic of Germany :	North/Central West South
United Kingdom :	England and Wales Scotland Northern Ireland

13. Marker Prices and associated information shall be reported for each Member State as described in paragraph 12 above for three categories of large industrial consumer, i.e. those industrial consumers with maximum demands of about:

---

\* The regions for the Federal Republic are defined as:  
North/Central: Schleswig-Holstein, Bremen, Hamburg, Berlin, Niedersachsen and North Hessen.  
West : Nordrhein-Westfalen, Rheinland-Pfalz, Saarland and South Hessen.  
South : Baden Württemberg and Bavaria.



25 MW, covering consumers with maximum demands between 17,5 MW to 37,5 MW.

50 MW, covering consumers with maximum demands between 37,5 MW to 62,5 MW, and

75 MW, covering consumers with maximum demands between 62,5 MW to 75 MW.

These categories include any industrial consumers which also produce a part of their own electricity needs themselves, although only information relating to their consumption from an electricity utility is required to be reported.

14. The Marker Price for a given MW category (e.g. 25 MW) is the average price payable per kWh for a notional or "Marker Price" industrial consumer of the utility in question with a normal maximum demand of about the appropriate size (i.e. 25 MW), but before any reductions for "special factors", which should be reported separately, (see paragraph 17 below). This "Marker Price" industrial consumer should have demand characteristics as far as possible representative, (ignoring "special factors") of all the industrial consumers in the category in question served by the utility. In order to try to achieve a measure of homogeneity, however, the Commission will define demand characteristics for "Marker Price" consumers for each category, (i.e. 25 MW, 50 MW and 75 MW), which should be adopted by a reporting utility where appropriate. If such demand characteristics are not appropriate, the utility may define its own "Marker Price" consumer demand characteristics, subject to the approval of the Commission. These demand characteristics refer, for example, to the load factor, (e.g. "7000 hours", where 7000 is the number of hours for which the maximum demand would have to be in effect to obtain the annual consumption), and the distribution of consumption by the different time-of-day charge bands, (e.g. peak, off-peak, etc.).
15. The Marker Prices given should be calculated so as to include all fixed charges payable, (e.g. meter rental, fixed charges or capacity charges etc.), as well as the charges for the kWh's consumed. Initial connection charges, however, should not be included. Although information is to be provided twice yearly, annual consumption figures should be used in order to avoid seasonal variations. The way in which the Marker Price is calculated, including the inclusion of any fixed charges, should be explained.
16. For each Marker Price a range of "special factors" which may be applied to reduce the price of electricity, (e.g. interruptibility clauses), should be described and the amount of reduction, (e.g. 6%, 8%, 10%,) indicated. These special factors should be representative of factors which are in reality used by the industrial consumers supplied by the reporting utility in the MW category being surveyed.

17. In Member States where there is more than one electricity utility, these utilities shall each provide Marker Prices and the associated information, (on the demand characteristics of the notional "Marker Price" industrial consumer, (paragraph 15), and on the special factors and their price reductions (paragraph 17)), to an independent statistical body. These bodies shall then pass on the highest and the lowest Marker Price for the Member State, (or for each region if applicable) for each MW category, together with the associated information for these Marker Prices, simultaneously to the Commission and to the national administration. For the other Member States, where one national utility covers the whole country, the information shall be reported directly and simultaneously to the Commission and to the national administration.
18. In order to preserve confidentiality, Marker Prices and the associated information shall be reported by the independent statistical body or the national utility as appropriate (see paragraph 18 above) for a given MW category, only where at least three consumers in the MW category are present in the Member State or region concerned.
19. Marker Prices should be given in national currency per kWh:
  - with all taxes excluded, and
  - with all taxes, except recoverable VAT, included.

The levels of taxes, (excluding recoverable VAT), should be indicated as well as an explanation of their application.
20. Supply utilities should also provide data, once every two years, on the number of its consumers in each MW range, (i.e. 17.5 - 37.5 MW, 37.5 - 62.5 MW, and 62.5 - 75.0 MW), and the total annual consumption of these consumers for each range, (in GWh). As with the information required under paragraph 18, this information shall be passed either via an independent statistical body, which shall collate information for the Member State as a whole, or directly and simultaneously to the Commission and to the national administration. The information required under this paragraph will be provided on a confidential basis and will not be published.

## FINANCIAL RECORD

---

The Directive has no immediate financial implications. The matter will be re-examined when the draft 1991 budget is drawn up, by which time the publications and surveys related to the application of the Directive will be published on a six-monthly basis.



# DOCUMENTS

EN

15 13

---

Catalogue number : CB-CO-89-410-EN-C

ISBN 92-77-52948-2

---

Office for Official Publications of the European Communities  
L-2985 Luxembourg