MINISTRY OF INDUSTRY AND ENERGY

30041 *ROYAL DECREE 2818/1998, of December 23, 1998, on production of electricity by facilities powered by renewable energy resources or sources, waste or cogeneration*.

Law 54/1197, of November 27th, on the Electricity Sector, establishes the principles of a new model of operation that bases production on free competition. The law makes this basis compatible with the achievement of other objectives such as improving energetic efficiency, reduction of consumption and protection of the environment, which, on the other hand, are in keeping with Spanish commitments to reduce greenhouse gases. It thus establishes the existence of a special legal system for electricity production, as differentiated from the ordinary system, for their achievement. In the latter, the regulating mechanism is the production market in which offers and demands for electricity cross and where the prices are established as a consequence of their functioning as an organized market.

This Special System has been governed since 1980 by various regulations. However, the new Law makes promotion of the present Royal Decree obligatory in an attempt to adapt the operation of that system to the new regulations and introduction of competition.

The present Royal Decree develops Law 54/1997 of November 27th on the Electricity Sector with the modifications introduced by Law 66/1997 of December 30th on Fiscal, Administrative and Corporate Measures and promotes the development of facilities under a special legal system through the creation of a favorable framework without incurring in discriminatory situations that could limit free competition, while establishing differentiated situations for those energy systems that contribute more efficiently to the above mentioned objectives.

In order to achieve that goal, a system of temporary incentives is established for those facilities which require it to become competitive on the free market.

For facilities based on renewable or waste energies, this incentive has no time limit, since their environmental benefits must be internalized and, due to their special characteristics and level of technology, their considerable cost does not allow them to compete on the free market.

The incentives which are established for renewable energies are such that they are going to enable their contribution to the Spanish energy demand to be a minimum of 12 per cent in the year 2010 as established in the Sixteenth Transitional Provision of Law 54/1997 of November 27th on the Electricity Sector.

Likewise, this Royal Decree establishes a sufficiently dilated transitional period in which the system which that regulation established may continue to be applicable to the facilities covered by the above mentioned regulation.

In virtue of the above, at the proposal of the Ministry of Industry and Energy, in agreement with the State Council, with the approval of the Ministry of Public Administrations, and with the

prior deliberation of the Council of Ministers at their meeting of December 23, 1998,

I DECREE:

CHAPTER I

Object and field of application

Article 1. *Object.*

The present Royal Decree has as its object:

a) Develop regulations for the Special System in Law 54/1997 of November 27th on the Electricity Sector, relating to the requirements and procedures for applying the Special System, procedures for entry in the corresponding Registry, conditions for delivering energy and economic schedule.

b) Establish a transitional system for facilities which, at the time the above mentioned Electricity Sector Law became effective, were covered by Royal Decree 2366/1994 of December 9th on electricity generation for hydraulic, cogeneration or other facilities powered by renewable energy sources or resources.

c) The determination of a premium for facilities of over 50 MW which use non-consumable and non-hydraulic, biomass, biofuel or agricultural, livestock or service waste renewable energies as the primary energy source according to the provisions of article 30.5 of the Law on the Electricity Sector.

Article 2. Area of application.

1. Those facilities producing electricity which have an installed electrical power lower than or equal to 50 MW and fulfill the following requirements may apply the Special System established in this Royal Decree:

a) Self-producers using cogeneration or other forms of thermal electricity generation associated with non-electric high energy performance activities and that satisfy the requirements specified in Annex I.

These types of installations are classified into two groups:

a.1.) Facilities including a cogeneration power plant, understanding as such those which combine the production of electricity with the production of heat for later energy or non-energy uses.

a.2.) Facilities including a power plant using waste energy from any type of facility, machine or industrial process, the objective of which is not the production of electricity.

Self producers are considered to be those physical or legal persons generating electricity basically for their own use, understanding this to be own consumption of at least an annual average of 30% of the electricity produced if its power is less than 25 MW and of at least 50% if equal to or over 25 MW.

For the purposes of computing self consumption as referred to in the previous paragraph,

electricity consumed by those companies that have over 10 per cent participation in ownership of the production plant covered by the Special System may be considered.

In any case, there should be only one perceiver of premiums who, furthermore, should have the measurement devices necessary to accredit compliance with the above conditions available.

b) Facilities which use as their primary source of energy any of the renewable non-consumable energies, biomass or any type of biofuel, classified into the following groups:

b.1.) Facilities which only use solar energy as the primary energy source.

b.2.) Facilities that use only wind as the primary energy source.

b.3) Facilities which use only geothermal energy, energy from waves or tides or dry hot rocks as the primary energy source.

b.4.) Hydroelectric plants having a power rating not over 10 MW

b.5) Hydroelectric plants with power rating over 10 MW but not over 50 MW.

b.6.) Power plants that use biomass as the main primary energy source, understanding this to be plants which grow in less than a year, that can be used directly or after transformation processing to produce energy (natural resources and energy plantations). The main fuel is understood to be at least 90 per cent of the primary energy used, measured by the lowest thermal power.

b.7.) Power plants that use as the main fuel secondary biomass, understanding this to be waste products from a first usage of biomass, mainly manure, sludge from waste water treatment, agricultural and forest wastes, biofuel and biogas. Main fuel is understood to be a minimum of 90 per cent of the primary energy used, measured by the lowest thermal power.

b.8.) Power plants that use energies included in groups b.6 and b.7 above, together with conventional fuels, as long as the latter do not make up more than 50 per cent of the primary energy used, measured by the lowest thermal power. The heat generated by the conventional fuel may only be paid at the market price referred to in article 24 of this Royal Decree.

b.9.) Power plants combining any of the above groups.

c) Facilities that use wastes not considered in paragraph b) above as primary energy, and which are classified into the following groups:

c.1.) Power plants that use urban waste as the main fuel. Main fuel is understood to be at least 70 per cent of the primary energy used, measured by the lowest thermal power.

c.2.) Facilities that use other wastes not considered as the main fuel above. Main fuel is understood to be at least 70 per cent of the primary energy used, measured by the lowest thermal power.

c.3.) Power plants that use energies included in the above groups, together with

conventional fuels, as long as the latter do not make up more than 50 per cent of the primary energy used, measured by the lowest thermal power. The electricity generated by conventional fuels will only be paid at the market price referred to in article 24 of the present Royal Decree.

d) Waste treatment and reduction facilities in the agriculture, livestock and service sectors, with an installed power equal to or lower than 25 MW. These facilities should satisfy the requirements of energy performance specified in Annex I of this Royal Decree. They are classified into the following groups:

d.1) Facilities for treatment and reduction of hog purine.

d.2) Facilities for treatment and reduction of sludge.

d.3) Facilities for treatment and reduction of other waste products not considered above.

2. This Royal Decree on the Electricity Sector is not applicable to those facilities which at the time it becomes effective were subject to the system foreseen in Royal Decree 1538/1987 of December 11th, in which electricity tariffs of companies administering the service are determined, except if they have not produced for the five years previous to applying for inclusion and outlived the period of their useful life as established in that regulation, and the facilities in the groups defined in Paragraph b) above when the owner carries out production activities under the ordinary system.

3. Understood as included in the present Royal Decree are those facilities covered by Royal Decree 2366/1994, after the Law on the Electricity Sector becomes effective.

However, the owners of these facilities should apply to the appropriate authority for assignment to any of the groups defined in this article and entry in the corresponding Registry, according to Chapter II of this Royal Decree.

Article 3. *Power of facilities*

1. The nominal power shall be as per the specifications plate on the alternator, corrected by the following measurement conditions, if necessary:

a) Load: 100 percent under nominal design conditions
b) Altitude: where the equipment is located
c) Ambient temperature: 15°C
d) Load losses: admission 150 mm c.d.a.; Exhaust 250 mm c.d.a.
e) Losses from dirt and degradation: 3 per cent.

2. The power limit set for the purposes of application of the Special System or for determining the economic schedule established in Chapter IV of this Royal Decree, shall be the total power of the units considered as only one facility for each one of the groups defined in Article 2 of this Royal Decree:

a) Groups a and d: facilities that are the property of the same or of different owners having at least one consumer of thermal process energy in common or the waste energy of which comes from the same industrial process.

b) Groups b: for the facilities in groups b.1, b.2 and b.3, those which feed their energy into the same transformer with output tension equal to that of the distribution or transport grid to which they are connected. If, as a consequence of what is described in Article 20.5 of this Royal Decree, several production facilities use the same evacuation installations, the above reference is understood with regard to the transformer before the one that is common to several production facilities.

For facilities in groups b.4 and b.5, those having the same altitude of intake and drain within the same hydro concession.

c) For remaining facilities, those having own electromechanical equipment.

CHAPTER II

Procedure for inclusion of an electricity production facility in the Special System

SECTION 1. GENERAL PROVISIONS

Article 4. *Administrative responsibilities*.

1. The administrative authorization for the construction, operation, substantial modification, transmission or shutdown of production facilities under the Special System and recognition of its applicability to production facilities corresponds to the Regional authorities responsible for these matters.

2. The Directorate General of Energy of the Ministry of Industry and Energy shall:

a) Authorize the construction, operation, substantial modification, transmission and shutdown of production facilities under the Special System and recognize its applicability to production facilities when the Region where the facility is located is not responsible or when the facilities are located in more than one Region.

b) Authorize construction, operation, substantial modification, transmission and shutdown of facilities when their operation affects more than one Region, after prior consultation in the case of the Region where the facility is to be located.

c) Enter the installations regulated by this Royal Decree in the Administrative Registry of Electricity Production Facilities. Communication of such registration to the National Commission of Electricity Systems or, when applicable, to the market operator, for liquidation of the energy.

3. The above responsibilities are understood not to prejudice others corresponding to each authority with regard to the installations subject to the present regulation.

Article 5. *Authorization of facilities*.

The procedure for the awarding of administrative authorization for the construction, modification, operation, transmission and shutdown of the installations to which this Royal

Decree refers, when it is the responsibility of the Ministry of Industry and Energy, is governed by the rules by which the electricity production facilities are generally governed without prejudicing the concessions and authorizations which may be necessary, according to other provisions that may become applicable.

Article 6. *Requirements for inclusion of a facility in the Special System*.

1. The condition of production facility under the Special System shall be awarded by the Administration responsible for its authorization. Owners or operators of the installations that wish to be covered by this system should apply to the responsible Administration for inclusion in it under one of the groups referred to in Article 2 of this Royal Decree.

2. In order for a production facility to be covered by the Special System, in addition to compliance with the requirements referred to in Article 2 of this Royal Decree, the main technical facility operating characteristics must also be accredited.

3. Likewise, electricity to be transferred to the grid, when applicable, should be quantified by due evaluation.

4. Facilities included in groups a) and d) of Article 2 of this Royal Decree should justify the extra electricity transferred to the grid, as a function of their structure, production rate and energy consumption. It should also accredit the following facility specifications:

a) The maximum power to be delivered with the minimum consumption compatible with the process.

b) The minimum power to be delivered compatible with the process associated with operation under normal load.

c) The minimum power to be delivered compatible with the technical conditions of the generator group, for producers which have no industrial process.

d) Compliance with energy performance stipulated in Annex I of this Royal Decree, for which an energy study accrediting this should be carried out, justifying if applicable, the need for process heat produced in the various operating modes foreseen for the installation.

SECTION 2. PROCEDURE FOR INCLUSION IN THE SPECIAL SYSTEM

Article 7. *Presentation of the application*.

Applications for inclusion in the Special System of facilities which must be authorized by the General Directorate for Energy, should be presented by the owner or operator of the facility, understanding by that the owner, renter or concessionaire of the hydro facility or owner of any other rights linked with facility operation. This application should be accompanied by the documentation accrediting the requirements to which the article above refers, as well as an annual-summary report on the entity applying, which should contain:

a) Name or denomination of the company and address of the applicant.

b) Corporate capital and shares with over 5 per cent participation, if applicable, and amount of participation. List of affiliated companies in which the owner has a majority share.

c) Energy efficiency, technical and security conditions of the facility for which the application for inclusion in the Special System is being made.

d) List of facilities also owned which are already covered by this System.

e) Copy of balance and results of the last fiscal year.

Article 8. *Processing and decision*.

1. When the documents required of the applicants are already in the possesion of an administration department, the applicant may be covered by the specifications of Paragraph f) of Article 35 of Law 30/1992, of the Legal Structure of Public Administration and Common Administrative procedure, as long as the date and the department or dependency to which they were presented or, if applicable, issued are clearly stated.

In those cases when it is materially impossible to obtain the document, duly justified in the file, the competent authority may require the applicant to present it or, lacking it, the accreditation by other means of the requirements to which the document refers before formulating the decision proposal.

2. Processing of the application shall be as specified in Law 30/1992, and in the rules for carrying it out.

3. The General Directorate of Energy shall make a decision on the application within a period of six months. The lack of an express decision within this period shall have the effect of disqualifying it. However, this may be appealed to the corresponding administrative authority.

SECTION 3. REGISTRY OF PRODUCTION FACILITIES IN THE SPECIAL SYSTEM.

Article 9. *Administrative Registry of Production Facilities under the Special System*.

1. A section called the “Administrative Registry of Production Facilities under Special System” is created in the Administrative Registry of Electricity Production Facilities referred to in Article 21.4 of the Law on the Electricity Sector, as a dependency of the General Directorate of Energy of the Ministry of Industry and Energy in order to adequately control the Special System and, specifically, for the management and control of premiums for installed power, development of electricity produced, energy sent to grid and primary energy used,.

2. The procedure for entry in this Registry will consist of a pre-registration and a definitive registration.

Article 10. *Coordination with the Regional Governments*.

1. Without prejudicing the provisions of the article above, those Regions competent in the material may create and manage the corresponding territorial registries.

2. In order to guarantee exchange of entries between the Administrative Registry of Production Facilities under Special System and any Regional registries that may be created, as well as to facilitate and standardize data submission between the General State Administration and the Regions, Annex III of the present Royal Decree establishes the form to be used for pre- and definitive registration in the Registry. These forms shall be used by the Regions for communicating data to be registrated in the Registry of the General Directorate of Energy as well as for transmitting those entries which affect their territorial area.

Article 11. *Pre-registration*.

1. Pre-registration in this Registry shall be done when the production facility has been awarded coverage by the Special System. For this, the appropriate Regional Government should transfer, within one month, registration of the facility to the Regional registry or, if applicable, the decision by which that condition is awarded, for pre-registration in the Registry.

If the condition of facility under the Special System has been awarded by the General Directorate of Energy, it shall proceed with pre-registration within one month.

2. During pre-registration a registry identification number shall be assigned that shall be communicated to the appropriate Regional Authority for notification of the applicant. However, the General Directorate of Energy shall notify the applicant when it is the authority responsible.

Article 12. *Definitive Registration*.

1. The application for definitive registration, accompanied by a contract with a distributor, should be addressed to the corresponding Regional authority or, if applicable, to the General Directorate for Energy of the Ministry of Industry and Energy. This application may be presented simultaneously with application for the facility commissioning certificate.

2. If the responsibility for decision on an application corresponds to a Regional Government, it should communicate the entry made in the regional registry, or if applicable, the data necessary for definitive entry in the Registry of Production Facilities under Special System, within one month. When the General Directorate of Energy is the responsible authority, it should decide on the application within a maximum period of one month.

3. The definitive inscription in this Registry, in which its identification number is written, shall be communicated to the Regional Government so that it may notify the applicant and the distributor. However, notification shall be by the General Directorate of Energy when it is responsible for the facility.

Article 13. *Period for definitive registration*.

Pre-registration of a facility in this Registry shall be canceled if after two years of notification of the applicant, definitive registration has not yet been applied for. However, it

shall not be canceled if, in the judgment of the appropriate Administration there are good reasons for the entry to remain in the Registry, which it should communicate, in that case, to the General Directorate of Energy, expressing the period during which such entry should remain valid.

Article 14. *Updating documentation*.

The owners or operators of the facilities registered should send the authorizing office an annual report during the first quarter of each year for the year immediately preceding using the format established in Annex II of this Royal Decree.

Likewise, the facilities in Groups a) and d) of Article 2 of this Royal Decree shall send a certificate issued by an entity recognized by the authorizing office accrediting compliance with the requirements given in Annex I of this Royal Decree and notify any change in data submitted at the time of the facility was authorized for inclusion in the Special System or for entry in the Registry.

The Regional authorities responsible shall send the information to the General Directorate for Energy for entry in the Registry within a period of one month of reception.

Article 15. *Effects of registration*.

1. The facility shall be covered by the Special System from the time the decision is made by the authority responsible. However definitive registration of an installation in the Administrative Registry of Production Facilities under the Special System shall be a necessary requisite for the economic schedule regulated in this Royal Decree to be applied to the facility, which shall be effective from definitive inscription in the regional registry, when applicable.

2. Without prejudicing the provisions of the point above, the electricity that may have been sent to grid as a consequence of operation during testing prior to registration of the facility shall be paid at market price as established in Article 24 of this Royal Decree, after it has been registered.

Such test operation should be previously authorized and its duration should not exceed three months.

Article 16. *Cancellation of registration*.

of registration in the Administrative Registry of Production Facilities under Special System must be cancelled in the following cases:

a) Shutdown as a Production Facility under Special System.

b) Revocation by the authority responsible of recognition of the facility as covered by the Special System or revocation of facility authorization, according to applicable legislation.

The Administration responsible shall communicate cancellation or revocation as well as any other incident in the Registry inscription to the distributor and the General Directorate for Energy so that it may be noted in the Administrative Registry of Production Facilities under Special System.

CHAPTER III

Conditions for delivering electricity produced under the Special System

Article 17. *Contract with distributor*.

1. Owners of production facilities covered by the Special System and their distributors shall sign a minimum five-year contract, using the format established by the General Directorate of Energy, governing their technical and economic relations.

In this contract, the following minimum conditions shall be stipulated:

a) Point of connection and measurement, indicating at least the specifications of the equipment for control, connection, safety and measurement.

b) Qualitative and quantitative specifications of the energy sold and, when applicable, of consumption, specifying power and plans for production, consumption, sale and, if applicable, purchase.

c) Causes for cancellation or modification of the contract.

d) Economic conditions, according to Chapter IV of this Royal Decree.

e) Conditions for using connections as well as the circumstances under which it is considered technically impossible to absorb surplus energy.

f) Cost of energy delivered by the owner and charged to the distributor which must be paid within thirty days of issue of the corresponding invoice.

The distributor shall be required to sign this contract, even though no surplus electricity is produced at the facility, within a period of one month from the time at which the point and conditions of connection are determined, as established in Article 20.2 of this Royal Decree.

A copy of this contract shall be sent to the Administration responsible accompanying the application for definitive entry in the Registry as stipulated in Article 12 of this Royal Decree.

2. The invoice for surplus energy delivered to the distributor shall be sent monthly on a form approved by the General Directorate of Energy, which shall include the main specifications of each facility as specified in this Royal Decree.

Article 18. *Rights of producers under the Special System in their relations with distributors.*

In their relations with distributors, the owners of production facilities covered by this Special System shall enjoy the following rights:

1. Parallel connection of its generating group or groups to the distributor’s grid.

2. Transfer of electricity produced or surplus to the system through the distributor, as long as its absorption by the grid is technically possible, and be paid the wholesale market price plus incentives stipulated in the economic schedule in this Royal Decree.

3. Receive at all times from the distributor, as long as it is a client subject to regulated tariffs, the electricity necessary to perform its activities, for which it must pay the corresponding prices, tolls and costs of access.

4. Access to the electricity production market, if the consumer is so qualified, for purchase of the electricity required to perform its activities, paying the corresponding prices, tolls and costs thereof.

5. Access to the system of offers on the electricity production market, or negotiation of bilateral physical contracts, which in both cases must be annual and with prior communication to the Directorate General of Energy, Government of the Region where the facility is located, system operators and the market. Those producers who choose to join the system of offers shall receive the premiums corresponding to the application of the economic schedule foreseen only for energy matched and shall receive payment for guaranteed power and complementary services which the facility actually provides.

6. Transfer electricity to the consumer units, according to the provisions of Article 2 of this Royal Decree.

Article 19. *Obligations of the producers under the Special System*.

Without prejudice to the provisions of Article 30.1 of the Law on the Electricity Sector, the owners of production facilities under the Special System shall have the following obligations:

1. Deliver and receive the energy in adequate technical conditions, so that it does not cause problems for the normal operation of the system.

2. Abstain from delivering unconsumed surplus electricity to final consumers, except as stipulated in article 18.5 of this Royal Decree. Not considered for these purposes as delivery to final clients is delivery to another center of the same company, its subsidiaries, main office or any other member of a group owning the facility, thereby constituting a self-producer as defined in Article 2 of this Royal Decree.

3. Use the energy proceeding from its generating equipment for its own facilities, sending only its surplus electricity to the grid as defined in Article 21 of this Royal Decree.

4. Satisfy tolls and access tariffs for the use of the carrier or distribution grid in the following cases:

a) When they are acting as qualified consumers and sign electricity supply contracts.

b) When they supply to another center of the same company, group or main office, to its industrial associates, affiliates or any other member of the group holding title to the facility with consumption located at a different site than the generating plant. These tolls and costs

shall include the proportional part of the corresponding permanent system costs, according to third-party access regulations in effect at the moment.

5. The owners of the facilities in groups a.1, a.2, b.6, b.7, b.8, c.1, c.2, c.3, d.1, d.2 and d.3 as defined in Article 2 of this Royal Decree having power ratings over 10 MW should communicate any surplus electricity foreseen for each production market planning period to the distributor for its information. Plans for the 24 periods per day must be communicated at least thirty hours before the start of each day.

Article 20. *Connection to the grid*.

1. The administrative and technical regulations for operation and connection to the grids shall be established by the Ministry of Industry and Energy or by the corresponding offices of the Regional Governments within the areas of their authority. The criteria below must be observed:

a) All or part of the receiving installations of those owners whose groups are not connected in parallel to the grid shall be connected by a switching system, either to the distributor grid or to its own generating groups, to assure that in no case may they keep their generator groups connected to that grid.

b) Those owners whose groups are connected in parallel to the general grid shall do so at only one point, save special circumstances duly justified and authorized by the Administration responsible, and may use synchronous or asynchronous generators. Those facilities having power ratings of over 5 MW with synchronous generators, must be equipped with automatic disconnecting systems that avoid causing oscillation in tension or frequency over what is permitted and breakdowns or alterations in grid service when the facility delivers surplus electricity to the grid.

These owners must cut off the connection to the distributor grid if because of force majeure or others, duly justified and accepted by the Administration responsible, the distributor so requests. Normal service must be reestablished as quickly as possible, however. When this occurs, the authority responsible shall be informed.

c) The energy supplied to the distributor grid should have a cos ? as near as possible to that of the unit. Owners connected in parallel to the grid should take the measures necessary for this or arrive at an agreement with the distributor on this point.

Reactive energy demanded shall be taken for the purposes of this Royal Decree and for the calculation of the cos ? when active energy is delivered to the grid.

d) With regard to the maximum power admissible for connection of a production facility under the Special System, within the area of application considered in Article 2 of this Royal Decree, the following criteria shall be kept in mind, depending on whether connection to the distributor is to a line or directly to a substation:

1st. Lines: the total power of the facility connected to the line shall not be over 50 per cent of the capacity of the line at the point of connection, defined as the design thermal capacity of

the line at that point.

2nd. Substations and transformer centers (HV/LV): the total power of the facility connected to a substation or transformer center, shall not exceed 50 per cent of the installed transforming capacity for that voltage.

The facilities in group b.1 shall have specific regulations as dictated by the offices responsible, following the above mentioned criteria.

2. The point where the facilities delivering energy are connected to the general grid shall be established by agreement between the owner and the distributor or carrier.

The owner shall request a connection point and conditions, which in its judgment are the most appropriate, of the distributor. Within one month, the distributor shall notify the owner of acceptance or justify other alternatives. If the alternative proposal is not acceptable, the owner shall request the responsible office of the General Administration of the State or Region to decide on the discrepancy, which must be done within a maximum of three months from the date of such request.

3. The cost of the connection to the facility shall, in general, be charged to the owner of the production plant, although, in the case of self-producers, the provisions of the valid regulations concerning electrical connections shall apply.

4. If the office responsible is aware of circumstances in the grid of the acquiring company that technically impede the absorption of the energy produced, it shall set a period for their correction. The expenses of any modification in the acquiring company's grid shall be charged to the owner of the production facility, except if they are exclusively for its service, in which case they shall be charged to both parties by mutual agreement, keeping in mind the intended use of these modifications by each of the parties. In case of discrepancies, the corresponding office of the Administration responsible shall decide.

5. Whenever possible, several production facilities should try to use the same electricity evacuation installations, even though the owners are different. The responsible Administration offices, when they authorize this use, shall set the conditions that must be complied with by the owners in order not to invalidate the measurement of surplus energy from each of the producing facilities which use those evacuation installations.

Article 21. *Right of delivery of electricity generated under the Special System*.

1. The owners of facilities included in the Special System may only deliver the surplus electricity produced by its facilities into the system, save that corresponding to facilities included in groups b.1, b.2, b.3, b.4 and b.5 of Article 2 of this Royal Decree, which may introduce the total amount of electricity produced into the grid as long as it is no more than 12 percent of the total energy demand to which Transitional Provision 16 of the Law on the Electricity Sector refers.

For this purpose surplus electricity is considered to be the instantaneous difference

between the electricity sent to the general grid and that received from it at all points of connection between the producer or the self-producer and the general grid.

The facilities and equipment that consume thermal energy produced by a facility in Group a.1 as defined in Article 2 of this Royal Decree shall jointly form with that installation, a self-producing unit, regardless of their ownership.

In those cases where the consumer or consumers of the thermal process energy does not legally coincide with the owner, surplus electricity shall be that resulting from the instantaneous differences between electricity sent to the general grid and that received from it at all points of connection of the facility and/or of the consumers. For this purpose the consumption of thermal process energy of each one of the mentioned consumers should be at least 25 per cent of the thermal energy produced by the facility.

Under these assumptions, when deficits of electricity are produced, its acquisition may be contracted directly by each one of the consumers or, alternatively, by the producer.

2. If the owner or operator of a facility covered by the Special System decides to send all or part of the surplus to his affiliates, main office, associates or own centers, including those located at different sites, signing bilateral physical or financial contracts, the right to the premium shall be generated by the part not delivered to said agencies.

3. In island and off-peninsula systems, the Administration responsible may limit the total surplus power of generators covered by this Royal Decree to a corresponding percentage of hourly power demanded by the isolated system.

Article 22. *Conditions for delivery of the electricity*

1. Electricity delivered to the distributors, as per the above article, must be acquired by the nearest one having sufficient economic and technical characteristics for its later distribution. In case of a discrepancy, a decision shall be made on what should be done, after prior report to the National Electric System Commission, by either the responsible office of the Regional Government or the General Directorate of Energy of the Ministry of Industry and Energy when it is responsible.

In spite of the above, for the purposes of the corresponding payment, the Directorate General of Energy may authorize the closest distributor to acquire the electricity from the facilities, although these exceed its necessities, if that distributor is connected to another distributor, in which case it shall deliver its surpluses to the latter.

2. Delivery of surplus energy, depending on the type and power of the plant and its incidence in the electric system or in the zone where it is located, may be conditioned by the necessities of the distributor to which it is connected, as justified and accepted by the Administration responsible, on the peninsula as well as off it, or for exceptional reasons by force majeure, as well as the electricity grid or the production facility itself.

3. For facilities connected to the electric grid, it will be necessary for the owner and the distributor to come to an agreement in a comprehensive contract specifying all the points mentioned in Article 17 of this Royal Decree.

4. All the facilities under the Special System must have the electricity measurement equipment which permits invoicing and control as expressed in this Royal Decree.

Measurement shall be done immediately before the limit of the connection with the distributor. If measurement is not done at that point, the owner and the distributor must establish an agreement to quantify the losses that could occur up to such point that will be charged to the producer. Said agreement must be reflected in the contract that they sign on these matters.

When several production facilities under the Special System share connection installations, the point of measurement for invoicing shall continue to be considered as the point immediately before connection to the distributor. The energy thus measured shall be assigned to each production facility, together with the corresponding charge for losses, proportional to the individualized measurements of each production facility, which shall be done with the appropriate measurement equipment.

CHAPTER IV
Economic Structure

Article 23. *Price of the electricity delivered to the distributor by the facilities that are not covered by the general system of offers*.

The owners of facilities with power equal to or less than 50 MW which are definitively registered in the Administrative Registry of Production Facilities under the Special System, have no obligation to formulate offers to the wholesale market for those facilities, but shall have the right to sell their surplus or, when applicable, production of, electricity, to the distributors at the final average hourly production market price; the electricity shall be complemented, when applicable, by a premium or incentive as given in this chapter.

Article 24. *Definition of the final average hourly electricity production market price for facilities exempt from the general system of offer*.

1. The final average hourly electricity production market price is the average price that must be paid at each hour by hose who acquire energy by buying it on the electricity production market and liquidated by the market operator. For the purposes of this Royal Decree, this price shall be the one, temporarily, for those acquiring the energy, which is published by said market operator before the fifth working day of the following invoiced month.

2. The market operator shall publish, jointly with the above, two average prices.

The first price shall be the arithmetic mean corresponding to the total of hourly prices of the first eight hours of the days in the invoiced month. The second shall be the one

corresponding to the rest of the hours of the month. Both prices shall correspond to the peak and trough prices, respectively, in the simplified invoice format referred to in the following section.

3. Those facilities having a power rating equal to or less than 10 MW may take as the market price the peak and trough prices calculated monthly by the market operator, according to the specifications in the previous point.

Article 25. *Liquidation of energy under the Special System*.

1. The distributors which, by virtue of the application of this Royal Decree, have purchased electricity from the owners of facilities with definitive registration as referred to in Article 12 of this Royal Decree, have the right to be paid for the premiums satisfied for this item. For it, the amount of the incentives corresponding to those purchases of energy shall be subject to the corresponding liquidation process as established in Royal Decree 2017/1997, of December 26th, by which the procedure for liquidating costs of transport, distribution and marketing at tariff, of the permanent costs of the system and the costs of diversification and guaranteed supply are regulated.

2. For those producers which have chosen the system of wholesale market offer, or for those referred to in Paragraph c) of Article 1 of this Royal Decree, the amount of the incentives due them shall be received as an amount additional to the liquidation made by the market operator for the wholesale market.

3. The amounts of these incentives, which shall be paid by the distributors or, in their case, by the carriers to which they are connected, shall be subject to the liquidation process established in the above mentioned Royal Decree 2017/1997.

Article 26. *Price of electricity delivered*.

The payment which the producers obtain for delivering electricity from production facilities under the Special System shall be:

$$R = Pm + Pr \pm ER$$

where:

- *R* = payment in pesetas/kWh.
- *Pm* = market price as specified in Article 24 of this Royal Decree
- *Pr* = premium as established in this section
- *ER* = complement for reactive energy, which shall be applied to the sum of Pm and Pr. This shall be considered general in the tariff regulations, with the difference that if the power factor of electricity delivered to the distributor is over 0.9, the complement shall be credited to the producer and if it is lower, discounted.

Article 27. *Premiums for self-producing facilities which use cogeneration or other form of thermal production of electricity*.

1. The facilities defined in group a) of Article 2 of this Royal Decree with a power rating equal to or less than 10 MW shall have, during a period of ten years from their startup, a premium of 3.20 pesetas/kWh.

2. Facilities with power rating over 10 MW, but less than or equal to 25 MW shall have a premium as long as the transitional period to which the Eighth Transitional Provision of the Law on the Electricity Sector refers, lasts. This premium shall be derived from the following formula:

$$Premium = \frac{a(40 - P)}{30}$$

where *a* is the premium corresponding to facilities with power rating equal to or less than 10 MW and *P* the power of the facility, expressed in MW. The premium must be expressed by rounding off to two decimal digits.

3. The premium to which Section 1 above refers shall be updated annually by the Ministry of Industry and Energy according to the interannual variation in interest rates, electricity tariff for consumers without choice and of the price of gas, giving equal consideration to the three variables.

Article 28. *Premiums for the non-consumable renewable energy facilities derived from biomass and biofuels*.

1. The facilities in the groups that are listed in Paragraph b) of Article 2 of this Royal Decree shall have the following premiums:

b.1: For facilities with installed power of up to 5 kW, as long as the national installed power for this type of facility does not exceed 50 MW: 60 pesetas/kWh.

Rest of facilities: 30 pesetas/kWh.

b.2: 5.26 pesetas/kWh.

B.3: 5.45 pesetas/kWh.

B.4: 5.45 pesetas/kWh

B.5: The premium shall be derived from the application of the following formula:

$$Premium = \frac{b^2(50 - P^2)}{40}$$

where *b* is the premium corresponding to facilities in Group b.4, and *P* is the power rating of the facility, expressed in MW. The premium must be expressed by rounding to two decimal digits.

b.5: 5.07 pesetas/kWh.

b.7: 4.70 pesetas/kWh.

2. The premiums for groups b.2, b.3, b.4, b.6 and b.7 shall be updated annually by the Ministry of Industry and Energy, keeping in mind the variation in the average sale price of electricity, which shall be applied to the sum of market prices and the premium. For this the Ministry of Industry and Energy must also estimate the annual average market price. For this purpose the average sale price of electricity is defined as:

$$PM = \frac{I}{E}$$

where:

I = planned income derived from invoicing for supply of electricity, excluding the Value Added Tax and any other tribute which the consumption of electricity is charged.

E = planned energy supplied.

3. The facilities in groups b.1, b.2, b.3, b.4 and b.6 may choose not to apply for the premiums established in the above sections and received at all hours a total price of:

b.1: 11.02 pesetas/kWh.
b.3 and b.4: 11.20 pesetas/kWh.
b.6: 10.83 pesetas/kWh.
b.7: 10.46 pesetas/kWh.

These prices shall be updated with the criteria established in the section above.

4. The payment of the facilities in group b.9 shall be calculated in proportion to the installed power in each group.

Article 29. *Premiums for facilities supplied by resources or sources of energy coming from wastes.*

1. The facilities in Paragraph c) of Article 2 of this Royal Decree shall have the following premiums:

Plants that use solid urban waste, sludge from water treatment plants or industrial waste as the main fuel:

a) For power rating equal to or less than 10 MW: 3.70 pesetas/kWh.

b) For power rating over 10 MW, but equal to or less than 50 MW, the premium shall be derived from the application of the following formula:

$$Premium = d + \frac{(c + d)(50 - P)}{40}$$

where *c* is the premium corresponding to the facilities with power rating equal to or less than 10 MW, d the premium corresponding to the facilities referred to in Article 31 of this Royal Decree, and *P* the power rating of the facility, expressed in MW. The premium must be expressed by rounding to two decimal digits.

2. The premiums shall be updated annually according to the interannual variation in interest rates and the electricity tariff for consumers without choice or with the variation in the market price when all the consumers are qualified considering both variables equally.

Article 30. *Agricultural, livestock and service waste treatment and reduction plants*

1. The facilities in Paragraph d) of Article 2 of this Royal Decree shall have the right to the following premiums:

a) d.1: facilities with power equal to or lower than 15 MW: 3.90 pesetas/kW.

For facilities with power over 15 MW but equal to or lower than 25 MW, the premium shall be derived from the application of the following formula:

$$Premium = \frac{e \cdot (35 - P)}{20}$$

where *e* is the premium corresponding to facilities with power rating equal to or less than 15 MW, and *P* is the power of the facility expressed in MW. The premium must be expressed by rounding to two decimal digits.

b) d.2: for installations with power rating equal to or less than 10 MW: 3.90 pesetas kWh.

For facilities with power rating over 10 MW but equal to or less than 25 MW, the premium shall be derived from the application of the following formula:

$$Premium = f \cdot \left(\frac{10}{13}\right) \cdot \left(\frac{25 - P}{65}\right)$$

where *f* is the premium corresponding to facilities with power rating equal to or less than 10 MW and *P* is the power of the facility expressed in MW. The premium must be expressed by rounding to two decimal digits.

b) d.3: for facilities with power rating equal to or less than 10 MW: 2.5 pesetas/kWh.

For facilities with power rating over 10 MW but equal to or less than 25 MW, the premium shall be derived from the application of the following formula.

$$Premium = \frac{g \cdot (40 - P)}{30}$$

where *g* is the premium corresponding to facilities with power rating equal to or less than 10 MW and *P* is the power of the facility expressed in MW. The premium must be expressed by rounding off to two decimal digits.

2. The premiums shall be updated annually by the Ministry of Industry and Energy according to the variation between years of the interest rates, the electricity tariff for consumers without choice and the price of gas, considering the three variables in equal parts.

Article 31. *Premiums for facilities with installed power over 50 MW*.

Those facilities that use as primary energy non-consumable or hydroelectric renewable energies biomass, biofuels or agricultural, livestock or service wastes, even when they have an installed power over 50 MW, shall have the right to a premium of 1 peseta/kWh. These premiums shall be subject to the updates in Point 2 of Article 29 of this Royal Decree.

In spite of the above, these facilities, according to Article 23.1 of the Law of the Electricity Sector must make economic offers for sale of energy through the market operator.

Article 32. *Modifications in premiums and prices*.

Every four years the premiums set in this chapter of this Royal Decree shall be reviewed, as well as the values established for facilities covered by Royal Decree 2366/1994, without prejudicing the provisions of the Eighth Transitional Provision of the Law on the Electricity Sector, with attention to the evolution of the market price of electricity, the participation of the facilities in covering the demand and their incidence on the technical management of the system.

Only Additional Provision. *Facilities with power equal to or less than 50 MW not included in this Royal Decree*.

Although they may have committed energy in bilateral physical contracts, those facilities with installed power equal to or less than 50 MW and more than 1 MW which cannot be covered by this Royal Decree and those which, after the transitional period to which the Sixth Transitional Provision of the Law on the Electricity Sector refers has transpired, were not covered either, shall not be required to present economic offers to the market operator for all scheduled periods, but may make offers only for those periods deemed appropriate.

The facilities defined in the above paragraph that belong to companies linked to distributors to which the Eleventh Transitional Provision of the Law on the Electricity Sector refers may deliver their energy to that distributor as long as the transitional order lasts, invoicing it at the market price referred to in point 3 of Article 24 of this Royal Decree.

The energy from the facilities referred to in the first paragraph of this Additional Provision, but with installed power equal to or less than 1 MW, must be acquired by the distributors as stipulated in this Royal Decree and shall be paid at the simplified market price referred to in Point 3 of Article 24 of this Royal Decree.

First Transitional Provision. *Facilities covered by Royal Decree 2366/1994*.

According to the Eighth Transitional Provision of the Law on the Electricity Sector, the electricity production facilities which, when this Law becomes effective, are covered by the system described in Royal Decree 2366/1994, as well as those which are referred to in the Second Additional Provision of that Royal Decree shall remain under that system throughout the period established in the transitional order, and are not eligible for the system in the present Royal Decree.

The provisions of this Royal Decree must be applied to enlargements of any facility referred to in the first paragraph of this provision. For this purpose, the energy associated with the enlargement shall be that part of the electricity proportional to the power of the enlargement over the total power of the facility when it has been enlarged, and references to the power shall be to total power when the operation has been performed.

However, the production facilities referred to in this provision may, by express communication to the Directorate General for Energy, who shall forward it to the market operator, choose to be covered by the economic system applicable according to the present Royal Decree.

For the purposes of the provisions of Paragraph d) of Point 1 of Article 2 of Royal Decree 2366/1994, process heat produced is understood to be that used to attend to the thermal requirements of the producer-consumer defined in Point 1 of Article 9 of that Royal Decree.

Those facilities which, when this Royal Decree becomes effective, are delivering process heat produced to a consumer who is not the legal owner of the facility, shall have an adaptation period of three years to comply with the specifications in the above paragraph.

Second Transitional Provision. *Application of previous provisions*.

As long as the Ministry of Industry and Energy does not establish new technical regulations for operation and connection to the public service grid of these facilities, the Order of the Ministry of Industry and Energy of September 5, 1985 shall remain in effect.

Only Provision for Repeal. *Regulatory Repeal*.

Royal Decree 2366/1994 of December 9th on production of energy by hydroelectric, cogeneration and others supplied by resources or sources of renewable energies, as well as any other order of like or lesser rank which is contradictory to this Roayl Decree is repealed, except as specified in the First Additional Provision.

First Final Provision. *Character of the Royal Decree*.

The present Royal Decree is basic under the provisions of Article 149.1.22. and 25 of the Constitution.

The references to the procedures shall only be applicable to the facilities for which the State is responsible and in any case, shall adjust to the stipulations of Law 30/1992.

Second Final Provision. *On later modification of parameters or values*.

The Ministry of Industry and Energy is empowered to dictate those provisions necessary to carry out this Royal Decree and modify values or conditions set in its annexes if considerations related to the correct development of economic and technical management of the system so advise.

Third Final Provision. Date effective.

This Royal Decree becomes valid on January 1, 1999.

Done in Madrid on December 23, 1998.

JUAN CARLOS R.

The Minister of Industry and Energy
JOSEP PIQUÉ I CAMPS

ANNEX I
Minimum performance for production facilities

1. The performance of facilities is given by the formula: R=(E+V)/Q.

Q = Consumption of primary energy, with refrence to the minimum thermal value of the fuel used.

V = Thermal units of process heat demanded by the industry(ies), service company(ies) or final consumer(s) for their requirements. To evaluate the demand for process heat, the equipment consuming the thermal energy shall be that supplied by the electricity production facility under the Special System, located on one or various sites and which form part of the assets of the consuming entity.

E = Electricity generated as measured at the alternator terminals and expressed as thermal energy, with an equivalence of 1 kWh=860 kcal.

2. Primary energy attributable to the production of process heat (V) shall be that demanded by high-efficiency boilers in commercial operation.

Process heat production performance must be 90 per cent, which shall be revised depending on the technological development of these processes.

3. The Electrical Performance Equivalent (REE) of the facility shall be determined considering the result of the formula in the point above: REE = E/[Q - (V/0.9)].

To deterrmine the REE at the moment the Commissioning Certificate is issued, the prameters E, V and Q shall be counted during an uninterrupted period of two hours of operation at nominal load. For the purposes of justifiyng compliance in the annual declaration, the parameters E, V and Q accumulated during that period shall be used.

4. A necessary condition to be covered by the Special System regulated in this Royal Decree by the the production facilities in Groups a) and d) of Article 2 of this Royal Decree, shall be that the electric performance equivalent of the facility, averaged over a period of one year, shall be equal to or better than what corresponds to the fuel used in the following table:

Liquid fuels in plants with boilers.....	49
Liquid fuels in heat motors.....	56
Solid fuels.....	49
Natural gas and GLP in heat motors	55
Natural gas and GLP in gas turbines and other technologies	59

5. In facilities using several conventional fuels, the minimum performance required shall be applied to each, depending on the electricity and the primary energy that is technical attributable to them.

If a different conventional fuel from those recognized in point 4 is used, the Directorate General of Energy shall be requested to set the minimum performance required for that fuel.

6. For verification of the Electrical Performance Equivalent, in existing installations as well as in new ones, local and totalling measurement equipment shall be installed. Each one of the E, Q and V parameters shall have at least one set of measurement equipment.

ANNEX II

GENERAL DATA

Name or legal name of company:						
Address of the Company Service or Office in charge of filling in this information	Street		No.		Tel.	
	City			Province		
Name of Plant			Startup date:			
Location: Street or plaza, locale, etc.			No.		Tel.	
City		Province			Fax	
Main company activity:			CNAE			
Regional registration no.						

ELECTRICITY

a. Electrcity generated by the facility measured at alternator terminals	89		MWh			
b. Own consumption for plant services	92		MWh			
c. Electricity at plant (a-b)	94		MWh			
d. Electricity purchased	99		MWh	100		10^3ptas
e. Consumption (not included in point b)			MWh	104		10^3ptas
f. Electricity sold (c+d-e)	95		MWh	96		10^3ptas

THERMAL ENERGY RECOVERED

Process heat generated by the facility	119		10^3 kcal

PRIMARY THERMAL ENERGY

(To be filled in only by the owners of facilities that consume fuel)

Fuel used	Quantity		PCI		Value	
Natural Gas		10^3 Nm^3		Kcal/Nm^3		10^3ptas
Fuel Oil		Tons		Kcal/kg		10^3ptas
Gas Oil		Tons		Kcal/kg		10^3ptas
Biomass		Tons		Kcal/kg		10^3ptas
Urban waste		Tons		Kcal/kg		10^3ptas
Other waste		Tons		Kcal/kg		10^3ptas
Other fuels (indicate)		Tons		Kcal/kg		10^3ptas

PLANT PERSONNEL

N° of persons	Hours worked	Total Cost (Thous. ptas.)				
251/269	2557273	2567274		Thousands ptas		29272937294

Authorized Representative			
IID:		Position:	

In _____on _____ 199___

Signature _____

ANNEX III

Power plant: .....

Name of the plant .....
Technology (1)[(1)] .....
Location: Street or plaza, locale, etc. .....

City .....
Province .....

Group (See Article 2).....
Distributor it delivers to.....
Number of generator groups .....
Total nominal power in kW.....
Nominal power of each goup in kW .....
.....

Hydropower:
River .....
Fall in meters .....
Flow rate in m^3 per second .....
Classic thermal:
Type(s) of fuel(s) .....

Owner:

Name:.....
Address .....
City .....
Province .....

Registration date (in the Reginal Registry):

Temporary.....
Definitive.....

In _____ on _____ 199___

[(1)] Flowing hydraulic, pure pumping, mixed pumping, gas turbine, saturated steam turbine, superheated steam turbine, combined cycle, diesel motor, other (specify).