

BRAZILIAN ELECTRICITY REGULATORY AGENCY - ANEEL

RESOLUTION n. 290, DATED 03 AUGUST 2000.

Ratifies the Rules of the Wholesale Energy Market – MAE - and sets forth guidelines for its gradual implementation.

THE DIRECTOR GENERAL OF THE BRAZILIAN ELECTRICITY REGULATORY AGENCY – ANEEL, in accordance with the duties and responsibilities assigned to him under relevant regulations and pursuant to a decision made by its Board, in compliance with the provisions of Articles 12, Paragraph 3, and 14 of Law n. 9,648, of 27 May 1998, and of Article 12, Paragraph 4, of Decree n. 2,655, of 2 July 1998, contained in Proceeding n. 48500.004645/98-76, and whereas:

ANEEL is the agency in charge of ratifying the Market Agreement and any amendments thereto;

the General Assembly of the Wholesale Energy Market – MAE, held on 29 February 2000, approved the rules to be applied to that market, as set out in Proceeding n. 48500.004645/98-76;

ANEEL has held Public Audience AP-002/2000 for the purpose of obtaining inputs and additional information to improve the Rules of the Wholesale Energy Market – MAE, as a result of which many contributions have been incorporated into the document that shall define those rules, including proposals contained in reports of experts from Brazilian and foreign universities; and

the consolidation of the MAE through the establishment of the Market Rules is a basic requirement to introduce competition in the Brazilian electricity market, hereby resolves:

Article 1 – To ratify the Rules of the Wholesale Electricity Market (MAE Rules) and set guidelines for its gradual implementation, in accordance with the provisions of this Resolution.

Article 2 – The MAE Rules shall be implemented according to the stages and dates set out hereunder:

- I – Implementation of the 1st stage: by 1 September 2000;
- II – Implementation of the 2nd stage: by 1 July 2001; and
- III – Implementation of the 3rd stage: by 1 January 2002.

Paragraph 1 – The first stage shall be characterized by the definition, by the MAE, of the ex-ante electricity price on a monthly or weekly basis.

Paragraph 2 – The 2nd stage shall be characterized by the beginning of a double accounting, with prices and volumes calculated on an ex-ante and ex-post basis weekly.

Paragraph 3 – The 3rd stage shall be characterized by the adoption of procedures to define prices and volumes at one-hour intervals at most, with the double accounting maintained.

Article 3 – The MAE shall submit to Aneel the complementary documentation of the Market Rules with the required adjustments derived from the guidelines set out in this Resolution.

Paragraph 1 – No later than 15 days of the publication of this Resolution, the MAE shall also submit to Aneel an implementation timeline containing a development plan, a validation of computer models, and the implementation plan for measurements, as required for the operation of the Market Rules, taking into account the dates provided for in article 2.

Paragraph 2 – For all parties interested in the MAE Rules to have a clear understanding of them, a document shall be prepared describing their general contents and the basic concepts contained therein.

Paragraph 3 – The Algebraic Rules and Market Procedures for each implementation stage shall be submitted to Aneel before the beginning of each stage.

Paragraph 4 – The MAE Rules shall set forth the criteria for new agents to join the MAE Agreement or for the withdrawal of parties from it, with the observation that new agents shall not bear previous implementation costs.

Paragraph 5 – The arrangements for the provision of funds for the operation and management of the MAE Service Administrator – ASMAE – to be applied from the 2nd implementation stage on shall be submitted to Aneel for its ratification, and any implementation and operation expenses shall be covered by contributions provided by agents until the beginning of the said stage.

Article 4 – The National Electricity System Operator – ONS – and the MAE shall enter into an Operational Agreement aimed at ensuring an appropriate flow of information between them and the standardization of procedures and models.

Only Paragraph – The Operation Agreement must be ratified by Aneel within 15 days of the publication of this Resolution.

Article 5 – Chapter 2 of the MAE Rules, which deals with the provision of input data, is hereby ratified with the amendments derived from the following guidelines:

I – No later than 25 August 2000, the ONS shall define the present borders of the four submarkets, defined as the North, Northeast, South, and Southeast/Mid-West submarkets, which shall remain effective until 31 December 2005;

II – No later than 31 December 2000, the ONS and the MAE shall define the criteria and periodicity for the definition of submarkets and changes therein, which shall contemplate a transition mechanism for existing bilateral contracts;

III – In order to be registered with the MAE, all bilateral contracts to be entered into among agents must be itemized by settlement period and adjusted to the point of reference of the purchaser's submarket;

IV – In the 1st and 2nd stages of implementation of the MAE Rules, the loss factors, defined by settlement period and submarket, applicable to the checked generation and

consumption shall be calculated according to the same procedure adopted for the definition of initial contracts;

V – The MAE and the ONS shall submit to Aneel, for its ratification and implementation as of the 3rd stage, the methodology for defining the point of reference for each submarket and respective mechanism for calculating loss factors applicable to the checked generation and consumption, considering location aspects;

VI – The annual amounts of initial contracts and of Itaipu quotas shall be itemized monthly according to the criteria in force on this date within the MAE.

VII – For the operation of the MAE, as of 1 January 2001, generation agents shall report the monthly assured electricity volumes of their plants, in accordance with the monthly volumes provided for in their contracts, within 15 days before the beginning of the respective calendar year;

VIII – The MAE shall submit to Aneel, for its ratification and implementation as from the 3rd stage, the rule for the monthly itemization of the annual assured electricity volumes of generation agents;

IX – The MAE Rules shall determine the intervals at which price, availability, and inflexibility declarations of thermoelectric plants are to be submitted;

X – Generation agents shall be responsible for submitting the declarations referred to in the previous paragraph, which shall include all cost components in the price;

XI – The price and inflexibility declarations of thermoelectric plants participating in the Fossil Fuel Consumption Account – CCC – shall be regulated by ANEEL and limited to the volumes used in the definition of quotas of that account;

XII – The MAE shall implement, by the beginning of the 2nd stage, a market monitoring mechanism to enable Aneel to follow up the competitive behavior of the agents;

XIII – In the 1st stage, the ONS shall inform the MAE about the anticipated load by submarket and settlement period used in the definition of the ex-ante price; and

XIV – As of the 2nd stage, the anticipated load by submarket and settlement period used in the definition of the ex-ante price shall be based on the declaration of the agents, as adjusted at the submarket's point of reference.

Article 6 – Chapter 3 of the Market Rules, which deals with the calculation of the MAE price, is hereby ratified with the amendments derived from the following guidelines:

I – The MAE prices shall be established by sufficiently documented models validated by ANEEL, the MAE, and the ONS;

II – The MAE prices shall be directly obtained from computer models without any need of additional adjustments;

III – In the 1st stage of implementation of the MAE Rules, the price shall be established monthly or weekly in three load levels per submarket and calculated on an ex-ante basis using a medium-term hydrothermal optimization model;

IV – In the 2nd stage, the price shall be established weekly in three load levels per submarket and calculated on an ex-ante and ex-post basis and, for this purpose, in addition

to the model adopted in the 1st stage, a short-term hydrothermal optimization model shall be used; and

V – In the 3rd stage, the price shall be established in settlement periods of one hour at most per submarket on an ex-ante and ex-post basis and, for this purpose, in addition to the models adopted in the 2nd stage, an operation programming model shall be used.

Article 7 – Chapter 5 of the MAE Rules, which deals with penalties, is hereby ratified with the inclusion of a guideline according to which penalties shall be applied, where appropriate, according to the implementation stages provided for in this Resolution.

Article 8 – Chapter 6 of the MAE Rules, which deals with System Services Fees – EES, is hereby ratified with the inclusion of a guideline in accordance with which they shall be applied, where appropriate, according to the implementation stages provided for in this Resolution.

Article 9 – Chapter 7 of the MAE Rules, which deals with the Electricity Reallocation Mechanism – MRE, is hereby ratified with amendments derived from the following guidelines:

I – The procedure effective within the MAE for allocating surplus generated electricity to the total assured electricity of the system shall be maintained until 31 December 2000;

II – As of 1 January 2001, the electricity mentioned in the previous numeral shall be allocated according to the proportion of the assured electricity of plants participating in the MRE in the respective settlement period;

III – In the 1st stage, machine unavailability occurrences shall not be considered in the MRE calculation;

IV – The unavailability of plants above volumes of the forced output rate (TEIF) and of the programmed maintenance (IP), considered for plants in the calculation of their assured electricity, shall not be covered by the MRE, and the MAE shall submit to Aneel, for its ratification and implementation as of the 2nd stage, a monthly checking procedure based on the performance of each plant in the previous twelve months.

V – The assured electricity of plants in a monitoring phase, i.e., plants that have not reached enough capacity to generate it, shall be considered equal to the generated electricity; and

VI – The MAE shall submit to Aneel, for its ratification and implementation as of the 2nd stage, a procedure for all generators participating in the MRE to return to the Fossil Fuel Consumption Account – CCC – expense components related to thermal generation for producing electricity above the total assured electricity of the system.

Article 10 – Chapter 8 of the MAE Rules, which deals with the allocation of financial surpluses, is hereby ratified with the amendments derived from the following guidelines:

I – The allocation of financial surpluses and of positive exposures of agents shall be intended to make up for possible financial losses of agents caused by price differences among submarkets in connection with the following transactions:

- a) reallocation of assured electricity in the MRE;
- b) initial contracts among submarkets;
- c) Itaipu contracts;
- d) the portion of purchase and sale contracts for imported electricity signed until 12 August 1998, considered in initial contracts; and
- e) the rights of self-producers and generation public service concessionaires in consortia established according to Decree n. 915, of 6 December 1993, or in concessions granted until 12 August 1998 pursuant to Law n. 8,987, of 13 February 1995, or extended in accordance with article 20 of Law n. 9,074, of 7 July 1995.

II – any positive balance of the financial surplus and of positive exposures of agents shall be initially ear-marked to make up for any negative balance in the previous month and, if the balance remains positive, to reduce fees charged for services provided by the system, without forming any reserve fund;

III – The MAE shall submit to Aneel, for its ratification and implementation as of 1 January 2006, a competitive mechanism for the apportionment of rights to allocate the financial surplus to interested agents; and

IV – The funds derived from the mechanism defined in the previous numeral shall be used to reduce the fees charged for using the basic transmission network.

Article 11 – Chapter 9 of the MAE Rules, which deals with accounting procedures, is hereby ratified with the amendments derived from the following guidelines:

I – In the 1st stage, the accounting of the checked electricity shall be made with the ex-ante price;

II – As of the 2nd stage, two accounting procedures shall apply, namely, an ex-ante and an ex-post procedure;

III – The ex-ante accounting procedure shall consider load declarations, generation availability declarations, and bilateral contracts;

IV – The ex-post accounting procedure shall consider redeclarations of availability, the checked availability of plants, both of which shall be notified by the ONS, the checked volumes of the electricity required of the system, and commitments resulting from the ex-ante accounting procedure; and

V – The MAE shall submit certificates of audits of the accounting system, and of any reviews thereof, to Aneel before the first financial settlement based on a new version.

Article 12 – Chapter 10 of the MAE Rules, which deals with international interconnections, shall be adapted to comply with any general regulations that may be jointly established with regulatory agencies of bordering countries.

Only Paragraph – The provisions of items 10.3, 10.4, and 10.5 of the MAE Rules shall be provisionally applied by the MAE until the rules for international interconnections are ratified.

Article 13 – The mechanism for calculating capacity fees, the topic dealt with in Chapter 11 of the MAE Rules, shall reflect the assumptions set out in the “Basic Document for the Establishment of Market Rules” and shall be submitted by the MAE to ANEEL for its ratification, so that it may be implemented as of the 3rd stage.

Article 14 – The itemization of monthly prices by settlement period – modulation – of initial contracts and of assured electricity, the topic dealt with in Chapter 12 of the MAE Rules, shall comply with the following guidelines:

I – In the 1st stage, initial contracts shall be modulated according to the criteria effective on this date in the MAE;

II – The MAE shall submit to ANEEL, for its ratification and implementation as of the 2nd stage, ex-ante modulation rules for initial contracts, taking into account contracted limitations applied to the demand and monthly electricity volumes;

III – By 31 December 2001, the volumes of assured electricity of the plants shall be modulated according to the criteria effective on this date in the MAE;

IV – As of 1 January 2001, the modulation of volumes of assured electricity by settlement period of the plants, limited to the available power and respecting the monthly volume of the assured electricity, shall be notified by generation agents in advance as determined by the MAE;

V – As of 1 January 2001, the modulation of electricity volumes linked to Itaipu quotas by settlement period, limited to the available power and respecting the monthly volume of the assured electricity, shall be notified by the holders of such quotas in advance as determined by the MAE; and

VI – The MAE shall submit to Aneel, for its ratification and implementation as of the 3rd stage, the rule to be applied to the modulation of the assured electricity of generation agents.

Article 15 – The provision of additional power to the system on an exceptional basis shall comply with the following guidelines:

I – The ONS shall submit to ANEEL a report setting out the volumes of additional power and the generation periods required to meet the needs of the system appropriately;

II – ANEEL shall submit to the MAE any needs of additional power, establishing the limits of fixed and variable prices to be considered in connection with the payment for such generation;

III – The MAE shall define a competitive procedure for selecting generation bids in order to meet any needs of additional power;

IV – Payments for additional power shall guarantee the prices agreed upon in the competitive procedure, for which purpose the System Services Fee (ESS) shall be used and the following criteria shall be complied with:

- a) if the MAE price is equal to or exceeds the total price agreed upon (fixed and variable price), the payment shall be made at the total agreed upon price and the difference in relation to the MAE price shall be transferred to the EES;

- b) if the MAE price is lower than the total price and higher than the variable price, the plant shall be dispatched and the difference between the total price and the MAE price shall be covered by the EES; and
- c) if the MAE price is lower than the variable price, the plant shall not be dispatched and the fixed price shall be covered by the EES.

Article 16 – Chapters 1 and 4 of the Market Rules, which deal with definitions and interpretations and with the aggregation of measuring data, are hereby ratified with the necessary amendments derived from the guidelines set out in this Resolution.

Article 17 – Resolution n. 222, of 30 June 1999, is hereby revoked as of 1 September 2000.

Article 18 – This Resolution shall become effective on the date of its publication.

JOSÉ MÁRIO MIRANDA ABDO