## BRAZIL and PARAGUAY

Treaty concerning the hydroelectric utilization of the water resources of the Paraná River owned in condominium by the two countries, from and including the Salto Grande de Sete Quedas or Salto del Guairá, to the mouth of the Iguassu River (with annexes and exchanges of notes). Signed at Brasília on 26 April 1973

Authentic texts: Portuguese and Spanish. Registered by Brazil on 21 March 1974.

## BRÉSIL et PARAGUAY

Traité concernant la mise en valeur hydro-électrique des eaux du Paraná relevant de la souveraineté commune du Brésil et du Paraguay à partir du Salto Grande de Sete Quedas ou Salto del Guairá jusqu'à l'embouchure de l'Iguaçu (avec annexes et échanges de notes). Signé à Brasília le 26 avril 1973

Textes authentiques : portugais et espagnol. Enregistré par le Brésil le 21 mars 1974.

## [TRANSLATION — TRADUCTION]

TREATY¹ BETWEEN THE FEDERATIVE REPUBLIC OF BRAZIL AND THE REPUBLIC OF PARAGUAY CONCERNING THE HYDROELECTRIC UTILIZATION OF THE WATER RESOURCES OF THE PARANÁ RIVER OWNED IN CONDOMINIUM BY THE TWO COUNTRIES, FROM AND INCLUDING THE SALTO GRANDE DE SETE QUEDAS OR SALTO DEL GUAIRÁ, TO THE MOUTH OF THE IGUASSU RIVER

The President of the Federative Republic of Brazil, General of the Army Emilio Garrastazu Médici, and the President of the Republic of Paraguay, General of the Army Alfredo Stroessner,

Considering the spirit of cordiality between the two countries and the ties of fraternal friendship that unite them;

Their common interest in the hydroelectric utilization of the water resources of the Paraná River owned in condominium by the two countries, from and including the Salto Grande de Sete Quedas or Salto del Guairá to the mouth of the Iguassu River;

The provisions of the Final Act signed at Foz do Iguaçu on 22 June 1966, concerning the division into equal parts between the two countries of such electrical energy as may be produced by the differences in level of the Paraná River on the stretch referred to above;

The provisions of article VI of the Treaty of the River Plate Basin<sup>2</sup>;

The stipulations in the Declaration of 3 June 1971 of Asunción on the utilization of international rivers;

The studies of the Brazilian-Paraguayan Joint Technical Commission established on 12 February 1967;

The identical positions traditionally held by the countries concerning free navigation on the international rivers of the River Plate Basin,

Have resolved to conclude a treaty and, to that end, have designated as their plenipotentiaries:

The President of the Federative Republic of Brazil:

Ambassador Mário Gibson Barboza, Minister for Foreign Affairs;

The President of the Republic of Paraguay:

Dr. Raúl Sapena Pastor, Minister for Foreign Affairs,

who, having exchanged their full powers, found in good and due form,

Have agreed as follows:

Article I. The High Contracting Parties agree to utilize for hydroelectric purposes, jointly and in accordance with the provisions of this Treaty and the annexes thereto, the water resources of the Paraná River owned in condominium by the two

<sup>&</sup>lt;sup>1</sup> Came into force on 13 August 1973 by the exchange of the instruments of ratification, which took place at Asunción, in accordance with article XXV.

<sup>&</sup>lt;sup>2</sup> United Nations, Treaty Series, vol. 875, p. No. I-12550.

countries, from and including the Salto Grande de Sete Quedas, or Salto del Guairá, to the mouth of the Iguassu River.

Article II. For the purposes of this Treaty:

- (a) "Brazil" means the Federative Republic of Brazil;
- (b) "Paraguay" means the Republic of Paraguay;
- (c) "Commission" means the Brazilian-Paraguayan Joint Technical Commission established on 12 February 1967;
- (d) "ELETROBRÁS" means Centrais Elétricas Brasileiras S.A. ELETROBRÁS, of Brazil or such legal entity as may succeed it:
- (e) "ANDE" means the Administración Nacional de Electricidad of Paraguay, or such legal entity as may succeed it;
  - (f) "ITAIPU" means the binational entity created by this Treaty.

Article III. The High Contracting Parties shall create, with equal rights and obligations, a binational entity known as ITAIPU, with a view to undertaking the hydroelectric utilization referred to in article I.

- 1. ITAIPU shall be constituted by ELETROBRÁS and ANDE, each having equal participation in the capital, and shall be governed by the rules laid down in this Treaty, in the Statute which constitutes annex A thereto and in the other annexes.
- 2. The Statute and other annexes may be amended by agreement between the two Governments.

Article IV. ITAIPU shall have headquarters at Brasília, capital of the Federative Republic of Brazil, and at Asunción, capital of the Republic of Paraguay.

- 1. ITAIPU shall be administered by a Governing Council and an Executive Directorate composed of equal numbers of nationals of the two countries.
- 2. The meeting records, resolutions, reports or other official documents of the administrative organs of ITAIPU shall be written in Portuguese and in Spanish.

Article V. The High Contracting Parties authorize ITAIPU to undertake, during the period of validity of this Treaty, the hydroelectric utilization of the stretch of the Paraná River referred to in article I.

Article VI. The following shall be part of this Treaty:

- (a) The Statute of the binational entity known as ITAIPU (annex A);
- (b) The general description of the facilities for the production of electrical energy and the auxiliary works, with any modifications that may prove necessary (annex B);
- (c) The financial bases of ITAIPU and the conditions for the provision of its electrical services (annex C).

Article VII. The facilities for the production of electrical energy and the auxiliary works shall not produce any change in the boundaries between the two countries established in the treaties now in effect.

- 1. The facilities and works set up pursuant to this Treaty shall not confer upon either of the High Contracting Parties the right of ownership or of jurisdiction over any part of the other's territory.
- 2. The authorities declared competent by each of the High Contracting Parties shall establish, as appropriate and by such procedures as they deem proper, a suitable signal system in the works to be constructed, for the practical purposes of exercising jurisdiction and control.

Article VIII. The resources needed to constitute ITAIPU's capital shall be furnished to ELETROBRÁS and ANDE respectively by the Brazilian Treasury and by the Paraguayan Treasury or by the financing institutions designated by the Governments.

Sole paragraph. Either of the High Contracting Parties may, with the consent of the other, advance to it the funds to constitute the capital, on conditions established by agreement.

- Article IX. Such resources in addition to those mentioned in article VIII as are needed for studies, construction and operation of the power station and of the auxiliary works and facilities shall be provided by the High Contracting Parties or obtained by ITAIPU through credit operations.
- Article X. The High Contracting Parties shall jointly or separately, directly or indirectly, and in such manner as they may agree upon, give to ITAIPU, at its request, a guarantee for any credit operations it may carry out. They shall ensure in the same manner the exchange transactions necessary for the payment of the obligations assumed by ITAIPU.
- Article XI. In so far as possible and under comparable conditions, the skilled and unskilled manpower equipment and materials available in the two countries shall be utilized in an equitable manner.
- 1. The High Contracting Parties shall adopt all the necessary measures to enable their nationals to work, without distinction, on projects related to the purpose of this Treaty, carried out in the territory of either Party.
- 2. The provisions of this article shall not apply to the conditions agreed upon with financing institutions concerning the engagement of skilled personnel or the acquisition of equipment or materials. The provisions of this article shall also be inapplicable if technological conditions so required.
- Article XII. The High Contracting Parties shall adopt the following standards with respect to taxation:
- (a) They shall not impose taxes, charges compulsory or loans of any nature on ITAIPU and the electrical services provided by it;
- (b) They shall not impose taxes, charges or compulsory loans of any nature on such materials and equipment as ITAIPU may acquire in either country or import from a third country for use in the construction of the power station, its accessories and supplementary works or for incorporation in the power station, its accessories and supplementary works. Similarly, they shall not impose taxes, charges or compulsory loans of any nature affecting operations which are related to such materials and equipment and to which ITAIPU is party;
- (c) They shall not impose taxes, charges or compulsory loans of any nature on ITAIPU's profits and on its payments and remittances to any individual or corporate body provided that payment of such taxes, charges and compulsory loans is the legal responsibility of ITAIPU;
- (d) They shall impose no restriction or taxation on any movement of ITAIPU's funds resulting from the implementation of this Treaty;
- (e) They shall impose no restrictions of any nature on the transit or storage of the materials and equipment referred to in sub-paragraph (b) of this article;
- (f) The materials and equipment referred to in sub-paragraph (b) of this article shall be admitted into the territories of the two countries.

Article XIII. The energy produced by the hydroelectric utilization scheme referred to in article I shall be divided into equal parts between the two countries and each one shall have the right to acquire, in the manner laid down in article XIV, the energy not utilized by the other country for its own consumption.

Sole paragraph. The High Contracting Parties pledge to acquire, jointly or separately, in such manner as they may agree upon the total amount of installed power.

Article XIV. The electrical services of ITAIPU shall be acquired by ELETROBRÁS and ANDE, which may also acquire them through such Brazilian or Paraguayan enterprises or entities as they may designate.

Article XV. Annex C contains the financial bases of ITAIPU and the conditions for the provision of its electrical services.

- 1. ITAIPU shall pay royalties to the High Contracting Parties in equal amounts, for the utilization of the hydraulic potential.
  - 2. ITAIPU shall include in its cost of services the amount needed to pay profits.
- 3. ITAIPU shall also include in its cost of services the amount needed to compensate the High Contracting Party ceding energy to the other.
- 4. The real value of the amount in United States dollars intended for the payment of royalties, profits and compensation, laid down in annex C, shall be kept constant, and to that end, the said amount shall follow the fluctuations in the value of the United States dollar in terms of its equivalent in gold of the weight and fineness in effect on the date of the exchange of the instruments of ratification of this Treaty.
- 5. The said value of the United States dollar in terms of weight and fineness of gold may be replaced if the official parity of the dollar ceases to be tied to gold.

Article XVI. The High Contracting Parties express their determination to bring about all the conditions that will make it possible for the first generating unit to start operating within eight years after the ratification of this Treaty.

Article XVII. The High Contracting Parties undertake to declare to be areas of public utility the areas necessary for the hydroelectric utilization facility and auxiliary works and their operation, and take in their respective areas of sovereignty any administrative or judicial actions designed for expropriating land or land improvements or for establishing easements over the same.

- 1. ITAIPU shall be responsible for delimiting such areas, subject to approval by the High Contracting Parties.
- 2. ITAIPU shall be responsible for paying for the expropriation of the delimited areas.
- 3. Persons providing services to ITAIPU and goods consigned to ITAIPU or to individuals or bodies corporate under contract to it shall have free passage in the delimited areas.

Article XVIII. The High Contracting Parties may, by means of additional protocols or unilateral acts, adopt any measures necessary for the implementation of this Treaty, particularly those relating to the following aspects:

- (a) Diplomatic and consular;
- (b) Administrative and financial;
- (c) Employment and social security;
- (d) Tax and customs;
- (e) Passage across the international frontier;

- (f) Urban and housing;
- (g) Police and security;
- (h) Control of access to the areas delimited in accordance with article XVII.
- Article XIX. The competent jurisdictions for ITAIPU, with respect to individuals or bodies corporate domiciled or headquartered in Brazil or Paraguay, shall be those of Brasília and Asunción respectively. For that purpose, each High Contracting Party shall apply its own laws, taking account of the provisions of this Treaty and the annexes thereto.
- Sole paragraph. In connexion with individuals or bodies corporate domiciled or headquartered outside Brazil or Paraguay, ITAIPU shall establish by agreement the clauses that will govern contractual relations with regard to works and supplies.
- Article XX. The High Contracting Parties shall adopt, by means of an additional protocol to be signed within 90 days after the date of the exchange of the instruments of ratification of this Treaty, the legal rules applicable to the employment and social security relations of workers engaged by ITAIPU.
- Article XXI. The civil and/or penal responsibility of the councillors, directors, deputy directors and other Brazilian and Paraguayan employees of ITAIPU for acts harmful to the latter's interest shall be investigated and judged in accordance with the provisions of the respective national laws.
- Sole paragraph. In connexion with employees of a third nationality, proceedings shall be in accordance with Brazilian or Paraguayan national law, depending on whether the employees are assigned to Brazil or to Paraguay.
- Article XXII. Any disagreement over the interpretation or implementation of this Treaty and the annexes thereto shall be settled through the usual diplomatic channels, with no resultant delay or interruption in the construction and/or operation of the hydroelectric utilization scheme and of its auxiliary works and facilities.
- Article XXIII. The Brazilian-Paraguayan Joint Technical Commission established on 12 February 1967 with a view to carrying out the studies referred to in the preamble to this Treaty shall remain in existence until it submits to the High Contracting Parties the final report on the assignment entrusted to it.
- Article XXIV. This Treaty shall be ratified, and the respective instruments shall be exchanged as soon as possible at the city of Asunción.
- Article XXV. This Treaty shall enter into force on the date of the exchange of the instruments of ratification and shall remain in force until the High Contracting Parties, by a new agreement, adopt such decision as they may deem appropriate.

IN WITNESS WHEREOF the aforesaid plenipotentiaries have signed this Treaty, in duplicate in the Portuguese and Spanish languages, both texts being equally authentic.

DONE at the city of Brasilia on 26 April 1973.

MÁRIO GIBSON BARBOZA

RAÚL SAPENA PASTOR

## ANNEX A

## STATUTE OF "ITAIPU"

## Chapter I. DENOMINATION AND PURPOSE

- Article 1. ITAIPU is a binational entity established under article III of the Treaty signed by Brazil and Paraguay on 26 April 1973, the parties constituting it being:
- (a) Centrais Elétricas Brasileiras S.A. ELETROBRÁS, a Brazilian limited-liability company of mixed economy;
- (b) The Administración Nacional de Electricidad ANDE, a Paraguayan autarch entity.
- Article 2. The purpose of ITAIPU is the hydroelectric utilization of the water resources of the Paraná River owned in condominium by the two countries, from and including the Salto Grande de Sete Quedas, or Salto del Guairá, to the mouth of the Iguassu River.
- Article 3. ITAIPU shall be governed by the rules laid down in the Treaty of 26 April 1973, in this Statute and in the other annexes.
- Article 4. ITAIPU shall, in accordance with the provisions of the Treaty and the annexes thereto, have the juridical, financial and administrative capacity and the technical responsibility to study, plan, direct and execute the works for which it was established, bring them into service and operate them, for which purposes it may require rights and undertake obligations.
- Article 5. ITAIPU shall have headquarters at Brasília, capital of the Federative Republic of Brazil, and at Asunción, capital of the Republic of Paraguay.

## Chapter II, CAPITAL

Article 6. ITAIPU shall have a capital equivalent to US 100,000,000.00 dollars (one hundred million United States dollars), belonging to ELETROBRÁS and ANDE in equal and nontransferable parts.

Sole paragraph. The capital shall be kept at a constant value in accordance with the provisions of article XV, paragraph 4 of the Treaty.

## Chapter III. ADMINISTRATION

- Article 7. ITAIPU shall have as its administrative organs a Governing Council and an Executive Directorate.
- Article 8. The Governing Council shall be composed of 12 Councillors appointed as follows:
- (a) Six by the Brazilian Government, including one designated by the Ministry of Foreign Affairs and two by ELETROBRÁS;
- (b) Six by the Paraguayan Government, including one designated by the Ministry of Foreign Affairs and two by ANDE.
- 1. In addition, the Director-General and Deputy Director-General provided for in article 12 shall be participating but non-voting members of the Council.
- 2. The meetings of the Council shall be presided over alternately by a Brazilian and a Paraguayan Councillor and, on a rotating basis, by all the members of the Council.
- 3. The Council shall appoint two Secretaries, one Brazilian and the other Paraguayan, who shall be responsible, *inter alia*, for certifying documents of ITAIPU in Portuguese and in Spanish respectively.

- Article 9. The Governing Council shall be responsible for implementing and seeing to the implementation of the Treaty and the annexes thereto and for determining:
- (a) The fundamental administrative guidelines of ITAIPU;
- (b) The rules of procedure;
- (c) The plan of organization of basic services;
- (d) Actions resulting in any transfer of ITAIPU's patrimony, after consultation with ELETROBRÁS and ANDE;
- (e) Revaluations of assets and liabilities, after consultation with ELETROBRÁS and ANDE, taking account of the provisions of article XV, paragraph 4 of the Treaty;
- (f) The conditions for the provision of electrical services;
- (g) Proposals of the Executive Directorate relating to obligations and loans;
- (h) The proposed budget for each financial year and the revisions thereof, submitted by the Executive Directorate.
- 1. The Governing Council shall consider the annual report, balance sheet and statement of account, drawn up by the Executive Directorate and shall submit them, together with its comments, to ELETROBRÁS and ANDE in accordance with the provisions of article 24 of this Statute.
- 2. The Governing Council shall take note of the progress of ITAIPU's affairs by means of the statements which shall normally be made by the Director-General or other statements which the Council may request through him.
- Article 10. The Governing Council shall meet ordinarily every two months and, in extraordinary circumstances, when covened through the secretaries, by the Director-General or by half of the Councillors minus one.

Sole paragraph. The Governing Council may take valid decisions only when a majority of the Councillors of each country are present and with parity of votes equal to the smaller of the two national representations present.

- Article 11. Councillors shall have a term of office of four years and may be reappointed.
- 1. The Governments may at any time replace the Councillors appointed by them.
- 2. When a post of Councillor becomes definitively vacant, the Government concerned shall appoint a replacement, who shall serve for the remainder of his predecessor's term of office.
- Article 12. The Executive Directorate, constituted by nationals of both countries in equal number, shall consist of the Director-General and the Technical, Legal, Administrative, Financial and Co-ordinating Directors.
- 1, For each Director there shall be a Brazilian or Paraguayan Deputy Director of nationality other than that of the Director.
- 2. The Directors and Deputy Directors shall be appointed by the respective Governments on the proposal of ELETROBRÁS or ANDE as appropriate.
- 3. The Directors and Deputy Directors shall have a term of office of five years and may be reappointed.
- 4. The Governments may at any time replace the Directors and Deputy Directors appointed by them.
- 5. In the event of the absence or temporary incapacity of a Director, ELETROBRÁS or ANDE, as appropriate, shall designate a replacement from among the other Directors, who shall also be entitled to the vote of the Director he is replacing.
- 6. When a post of Director begames definitively vacant, ELETROBRÁS or ANDE, as appropriate, shall propose a replacement, who, after being appointed, shall serve for the remainder of his predecessor's term of office.
- Article 13. The responsibilities and duties of the Executive Directorate shall be as follows:
- (a) To implement the Treaty and the annexes thereto and the decisions of the Governing Council;

- (b) To implement and see to the implementation of the rules of procedure;
- (c) To carry out the administrative actions necessary for the conduct of the entity's business;
- (d) To propose fundamental administrative guidelines to the Governing Council;
- (e) To propose rules for personnel management to the Governing Council;
- (f) To prepare and submit to the Governing Council during each financial year the proposed budget for the following year and any revisions thereto;
- (g) To prepare and submit to the Governing Council the annual report, balance sheet and statement of account for the preceding financial year;
- (h) To implement the rules and conditions for the provision of electrical services;
- (i) To create and install, where appropriate, such technical and/or administrative offices as it may deem necessary.
- Article 14. The Executive Directorate shall meet ordinarily at least twice a month and, in extraordinary circumstances, when convened by the Director-General or at the request of one of the Directors to the Director-General.
- 1. Resolutions of the Executive Directorate shall be adopted by a majority of votes; the Director-General shall have the casting vote.
- 2. The Executive Directorate shall establish itself at such place as it may deem most suitable for the exercise of its functions.
- Article 15. ITAIPU shall be able to undertake obligations or issue powers of attorney only with the signatures of both the Director-General and another Director.
- Article 16. The honoraria of members of the Council, Directors and Deputy Directors shall be fixed annually be agreement between ELETROBRÁS and ANDE.
- Article 17. The Director-General shall be responsible for co-ordinating, organizing and managing ITAIPU's activities and shall represent it, at law and elsewhere, and be responsible for carrying out all the ordinary administrative actions necessary for the functioning of the entity, with the exception of those which are the responsibility of the Governing Council and the Executive Directorate. In addition, he shall be responsible for engaging and dismissing personnel.
- Article 18. The Technical Director shall be responsible for managing the project, constructing the works and operating the facilities.
- Article 19. The Legal Director shall be responsible for managing the entity's legal affairs.
- Article 20. The Administrative Director shall be responsible for personnel management and for supervising general services.
- Article 21. The Financial Director shall be responsible for implementing economic and financial policy and policy relating to supplies and purchases.
- Article 22. The Co-ordinating Director shall be responsible for handling administrative matters vis-à-vis the authorities of the two countries.
- Article 23. The Deputy Directors shall have such responsibilities as the Directors by agreement with them, may delegate to them.
- 1. The Deputy Directors shall keep informed about the business of their respective departments and shall report on the progress of the matters entrusted to them.
- 2. The Deputy Directors shall attend the meetings of the Executive Directorate and may participate in the discussions without a vote.

## Chapter IV. FINANCIAL YEAR

- Article 24. The financial year shall end on 31 December of each year.
- 1. ITAIPU shall submit the annual report, balance sheet and statement of account for the preceding financial year at any time up to 30 April of each year for decision by ELETROBRÁS and ANDE.

2. ITAIPU shall adopt the currency of the United States of America as a standard for its accounting operations. The said standard may be replaced with another by agreement between the two Governments.

## Chapter V. GENERAL PROVISIONS

- Article 25. ITAIPU shall assume as part of the capitalization by ELETROBRÁS and ANDE, the expenses incurred by the said enterprises, prior to the establishment of the entity, in connexion with the following:
- (a) Studies resulting from the Co-operation Agreement, signed on 10 April 1970;
- (b) Preliminary works and services relating to the construction of the hydroelectric utilization scheme.
- Article 26. Councillors, directors, deputy directors and other employees may not exercise management, administrative or consultative functions in enterprises that supply or contract for any materials and services utilized by ITAIPU.
- Article 27. Brazilian or Paraguayan public officials and employees of autarchic entities and of mixed-economy companies may perform services for ITAIPU without forfeiting their original connexion or any pension and/or social security benefits, due regard being had for the respective national legislation.
- Article 28. The rules of procedure of ITAIPU, referred to in article 9, shall be submitted by the Executive Directorate to the Governing Council for approval and shall deal, inter alia, with the following matters: the accounting and financial régime; the régime for obtaining bids and awarding and concluding contracts for services and works and the acquisition of property; rules for the exercise of their functions by the members of the Governing Council and the Executive Directorate.
- Article 29. Cases for which no provision is made in this Statute and which cannot be resolved by the Governing Council shall be settled by the two Governments after consultation with ELETROBRÁS and ANDE.

#### ANNEX B

# GENERAL DESCRIPTION OF THE FACILITIES FOR THE PRODUCTION OF ELECTRICAL ENERGY AND THE AUXILIARY WORKS

#### I. PURPOSE

The purpose of this annex is to describe and identify the main features of the project for the hydroelectric utilization of the Paraná River at the site called ITAIPU, hereinafter referred to as "the Project".

This annex was prepared on the basis of the "Preliminary Report" submitted to the Governments of Brazil and Paraguay by the Brazilian-Paraguayan Joint Technical Commission on 12 January 1973.

The works described in this annex may be modified or expanded, including their altitudes and dimensions if that should prove necessary during the implementation stage for technical reasons. In addition, if, for similar reasons, it proves necessary to reduce substantially the altitude of the dam crest, consideration will be given to the advisability of building an additional hydroelectric utilization scheme upstream, pursuant to the provisions of the aforementioned "Preliminary Report".

#### II. GENERAL DESCRIPTION

- 1. Location. The Project will be located on the Paraná River approximately 14 kilometres upstream from the international bridge joining Foz do Iguaçu, in Brazil, to Puerto Presidente Stroessner, in Paraguay.
- 2. General arrangement. The Project will consist of a main gravity dam, in concrete, across the Paraná River, with a powerhouse at its foot and of lateral rock-fill dams and earth dykes on each bank of the river. The lateral dam on the right bank will include the structure of the spillway, together with its gates.

The general direction of the works will be east-west along a broken-line axis with a total development of 8.5 kilometres. The normal maximum water level in the reservoir was established at about 220 metres above sea level. The reservoir will flood an area of approximately 1,400 km² (800 km² in Brazil and 600 km² in Paraguay) and will extend approximately 200 kilometres upstream up to and including the Salto Grande de Sete Quedas, or Salto del Guairá.

## III. MAIN COMPONENTS OF THE PROJECT

The Project includes the following main components, listed in sequence, beginning with the right bank:

- 1. Right lateral dyke. An earth dyke with the crest at an altitude of 225 metres, 700 metres long and with a volume of 103,000 m<sup>3</sup>.
- 2. Spillway. A concrete spillway with 14 gates, 380 metres long, capable of spilling up to 58,000 m³ per second, with an access channel dug upstream from the spillway. A channel lined with concrete will transmit the overflow from the spillway to the Paraná River approximately 1,500 metres downstream from the main dam.
- 3. Right lateral dam. A rock-fill dam with a crest at an altitude of 225 metres, 800 metres long and with a volume of 3,514,000 m³ joining the spillway to the main dam.
- 4. Main dam and water intake. The main dam will be a gravity structure, in solid concrete, with a crest at an altitude of 224 metres, 1,400 metres long and with a volume of 6,800,000 m³ to be built across the Paraná River and the channel on the left bank which will be dug in order to divert the river temporarily. The dam will have 14 water-intake openings equipped with gates. Each intake will give access, via a pressure pipe, to a turbine in the powerhouse.
- 5. Powerhouse. The powerhouse will be located at the foot of the main dam and will be 900 metres long and contain 14 generating units of 765 megawatts each. Four of the units will be situated in that part of the dam and intake to be built across the diversion channel. The upper platform of the powerhouse will be at an altitude of 139 metres and on it will be situated the transformer facilities for stepping up the generated voltage.
- 6. Left-bank dam. A concrete gravity dam, 250 metres long and with a volume of 1,100,000 m<sup>3</sup> which will have blocked openings and connexions for the construction of an intake intended for future expansion of the power station.
- 7. Left lateral dam. A rock-fill dam with a crest at an altitude of 225 metres, 2,000 metres long and with a volume of 13,145,000 m<sup>3</sup>.
- 8. Left lateral dyke. An earth dyke with a crest at an altitude of 225 metres, 3,000 metres long and with a volume of 3,115,000 m<sup>3</sup>.
- 9. Hernandarias supplementary dyke. A smaller earth dyke to be situated on the right bank approximately 4.5 kilometres west of the main dam, in the vicinity of the town of Hernandarias. The dyke will be designed to close off a depression into which the reservoir might overflow at maximum flood level.
- 10. Sectioning substations. Two sectioning substations to be situated one on each bank, approximately 600 metres downstream from the powerhouse.
- 11. Navigation works. The project will include such works as may be necessary to meet the needs of rive traffic, for example: land terminals and connexions, locks, canals, elevators and the like.

### ANNEX C

# FINANCIAL BASES OF ITAIPU AND CONDITIONS FOR THE PROVISION OF ITS ELECTRICAL SERVICES

#### I. DEFINITIONS

For the purposes of this annex:

- 1.1. "Entities" means ELETROBRÁS, ANDE or the Brazilian or Paraguayan enterprises or entities designated by them in accordance with article XIV of the Treaty signed by Brazil and Paraguay on 26 April 1973.
- 1.2. "Installed power" means the sum of the nominal plate power values expressed in kilowatts, of the alternators installed at the power station.
- 1.3. "Contracted power" means the power in kilowatts that ITAIPU will make available on a permanent basis to the purchasing entity for the periods and on the conditions specified in the respective contracts for the purchase and sale of electrical services.
- 1.4. "Finance charges" means all the interest, charges and commissions relating to the loans negotiated.
- 1.5. "Operating costs" means all costs chargeable to the provision of electrical services and covers direct operating and maintenance costs, including those for replacements necessitated by normal wear and tear, administrative costs and overhead costs, as well as insurance for the property and facilities of ITAIPU.
  - 1.6. "Operating and billing period" means the calendar month.
  - 1.7. "Operating account" means the annual balance of income and cost of services.

## II. CONDITIONS FOR THE PROVISION OF ELECTRICAL SERVICES

- II.1. The division of energy into equal parts as provided in article XIII of the Treaty, shall be effected by dividing the installed power at the power station.
- II.2. In exercise of its right to utilize the installed power, each entity shall conclude contracts covering periods of 20 years each with ITAIPU for fractions of the installed power of the power station according to a time-schedule of utilization which will cover the contract period and will indicate the power to be used each year.
- II.3. Each entity shall deliver the above-mentioned time-schedule to ITAIPU two years prior to the date on which the first generating unit of the power station is to begin commercial operation and two years prior to the expiry of the first and succeeding 20-year contracts.
- II.4. Each entity shall be entitled to utilize the energy that can be produced by the power it has contracted for, up to the limit to be established, for each operating period, by ITAIPU. It is understood that each entity may utilize the said power contracted for by it for as long as it wishes during each operating period, provided that the energy it utilizes during the entire period does not exceed the aforesaid limit.
- II.5. Where an entity decides not to utilize part of the contracted power or part of the energy corresponding to that power within the fixed limit, it may authorize ITAIPU to cede to the other entities that part of the power or energy which becomes available during the period referred to in II.4, on the conditions laid down in IV.3 below.
- II.6 The energy produced by ITAIPU shall be delivered to the entities through the bar system in the power station, on the conditions laid down in the contracts of purchase and sale.

## III. COST OF THE ELECTRICAL SERVICE

The cost of the electrical service shall consist of the following annual components:

III.1. The amount needed to pay to the parties constituting ITAIPU profits in the amount of 12 per cent per annum on their participation in the constituted capital, in accordance with article III, paragraph 1, of the Treaty and with article 6 of the Statute (annex A).

- III.2. The amount needed to pay the finance charges on the loans obtained.
- III.3. The amount needed to pay the amortization of the loans obtained.
- III.4. The amount needed to pay royalties to the High Contracting Parties, calculated at the equivalent of dollars US 650 per gigawatt-hours, generated and measured at the power station. The said amount may not be less than dollars US 18 million per annum, at the rate of one half for each High Contracting Party. Royalties shall be paid monthly in the currency available to ITAIPU.
- III.5. The amount needed to pay to ELETROBRÁS and ANDE in equal parts, reimbursement for administrative and supervisory expenses relating to ITAIPU, calculated at the equivalent of dollars US 50 per gigawatt-hour generated and measured at the power station.
  - III.6. The amount needed to cover operating expenses.
- III.7. The amount of the balance, whether positive or negative, of the operating account for the preceding financial year.
- III.8. The amount needed to pay compensation to one of the High Contracting Parties at a rate equivalent to dollars US 300 per gigawatt-hour ceded to the other High Contracting Party. Such compensation shall be paid monthly in the currency available to ITAIPU.

## IV. INCOME

- IV.1. Annual income from the contracts for the provision of electrical services shall be equal, each year, to the cost of the service established in this annex.
- IV.2. The said cost shall be broken down in proportion to the power values contracted for by the entities receiving the services.
- IV.3. Where the situation provided for in II.5 above occurs, the contracting entities shall be billed according to the power actually utilized.
- IV.4. Where the situation provided for in II.5 does not occur and with due regard being given to the provisions of article XIII of the Treaty and of IV.2 above, the entity which contracted the purchase shall be responsible for the amount corresponding to the entire contracted power.

## V. OTHER PROVISIONS

- V.1. The Governing Council, acting after consultation with ELETROBRÁS and ANDE, shall regulate the norms of this annex, with a view to increasing ITAIPU's efficiency.
- V.2. The value of the profits, the royalties, the reimbursement for expenses and the compensation referred to respectively in III.1, III.4, III.5 and III.8 above shall be kept constant in accordance with the provisions of article XV, paragraph 4 of the Treaty.

#### VI. REVIEW

The provisions of this annex shall be reviewed after 50 years, have elapsed from the entry into force of the Treaty, due regard being given, *inter alia*, to the degree of amortization of the debts contracted by ITAIPU for the construction of the utilization scheme and the relation between the power values contracted for by the entities of the two countries.

## **EXCHANGES OF NOTES**

Ia

26 April 1973

G/SG/DAA/DAM-1/01/241(B46)(B44)

Sir,

I have the honour to inform you that the Brazilian Government, acting through one of its financial institutions, will open a credit in an amount equivalent to fifty million dollars

(dollars US 50,000,000.00) for the Administración Nacional de Electricidad — ANDE, of Paraguay. The purpose of the said credit is to constitute the capital of ITAIPU, as provided in article 6 of annex A to the Treaty concluded this day between the Federative Republic of Brazil and the Republic of Paraguay.

- 2. To secure the loan, ANDE shall reserve the necessary part of the profits to which it becomes entitled in accordance with part III of annex C to the Treaty.
- 3. The plan for disbursing the loan shall conform to the scheme for constituting the capital which is to be approved by the Governing Council of ITAIPU.
  - 4. The rate of interest on the loan shall be 6 per cent per annum.
- 5. The interest due shall be capitalized annually and added to the value of the principal until the expiry of a period of eight years after the initial disbursement. The said period shall not, however, end before the payment by ITAIPU of the first annual profit as established in part III of annex C.
- 6. The amortization period shall extend 50 years after the expiry of the period referred to in the preceding paragraph.
- 7. The loan shall be paid by ANDE in equal annual instalments, including amortization of the principal and interest, during its period of amortization.
  - 8. The annual instalments shall be paid in the national currency of Brazil.
- 9. If the Government of Paraguay agrees to the foregoing, this note, together with your note in reply to it, shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

IIa

## MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 3.

Sir,

I have the honour to acknowledge receipt of your note dated today, the text of which, in Spanish, reads as follows:

## [See note Ia]

In reply, I am pleased to inform you that my Government agrees to the text of the above note and that, consequently, that note and the present note constitute an agreement between the two Governments.

Accept, Sir, etc.

RAÚL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília

13164

Ih.

26 April 1973

G/SG/DAA/DAM-I/02/241(B46)(B44)

Sir,

With reference to article X of the Treaty concluded this day between the Federative Republic of Brazil and the Republic of Paraguay, I have the honour to inform you that the Brazilian Government will provide a guarantee, on the terms specified below, for any credits that may be contracted for by ITAIPU in order to pay for goods and services necessary for the construction of the hydroelectric power station by the said entity.

- 2. For the purposes of obtaining the aforesaid guarantee, ITAIPU shall submit in advance to the Brazilian Government with the knowledge of the Government of Paraguay, the preliminary drafts of financing contracts relating to the credit operations in question, and when requested, contracts which have been concluded with the aim of utilizing the resources of such financing.
- 3. Resources in currencies of third countries which are obtained through financial operations must be negotiated on the Brazilian foreign-exchange market.
- 4. After the contract has been approved, the Brazilian Government will grant, during the period of construction of ITAIPU's hydroelectric power station, a guarantee of convertibility and transferability through the Brazilian foreign-exchange market for amortization and related payments in the currencies of third countries provided for in the contracts and conforming to the laws, rules and regulations which, due regard being given to the Treaty, are applied to loans and credits guaranteed by the Brazilian Government.
- 5. During the period of operation of the aforementioned hydroelectric power station, the Brazilian Government's guarantee of the convertibility and transferability of foreign currency commitments shall be granted in a proportion equal to that between the power contracted for by Brazil and the total installed power of the power station, according to the provisions of annex C, part IV.
- 6. If the Government of Paraguay agrees to the foregoing, this note and your note in reply to it shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

IIb

## MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 4.

Sir.

I have the honour to acknowledge receipt of your note dated today, the text of which, in Spanish, reads as follows:

[See note Ib]

In reply, I am pleased to inform you that my Government agrees to the text of the above and that, consequently, that note and the present note constitute an agreement between the two Governments.

Accept, Sir, etc.

RAÚL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília

Ic

26 April 1973

G/SG/DAA/DAM-I/03/241/(B46)(B44)

Sir,

With reference to the provisions of the sole paragraph of article XIII of the Treaty concluded this day between the Federative Republic of Brazil and the Republic of Paraguay, I have the honour to inform you that the Brazilian Government, acting through the Centrais Elétricas Brasileiras S.A. — ELETROBRÁS or the entities designated by the latter, undertakes to enter into contracts with ITAIPU, on the conditions established in the said Treaty and the annexes thereto so that the total contracted power shall be equal to the total installed power.

- 2. ANDE or the enterprises or entities designated by it, shall be entitled in the first 20-year contract concluded with ITAIPU to a 20 per cent tolerance above and below the contracted power value to be established in the time-schedule of utilization. The said tolerance shall be reduced to 10 per cent above and below in the second 20-year contract. However, if the tolerance range resulting from the application of the above-mentioned percentages is found to be less than 100,000 kilowatts, the said percentages shall be increased until the tolerance reaches a value of 100,000 kilowatts.
- 3. If the Government of Paraguay agrees to the foregoing, this note and your note in reply to it shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

Hc

#### MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 5.

Sir.

I have the honour to acknowledge receipt of your note dated today, the text of which, in Spanish, reads as follows:

[See note Ic]

In reply, I am pleased to inform you that my Government agrees to the text of the above note and that, consequently, that note and the present note constitute an agreement between the two Governments.

Accept, Sir, etc.

RAÚL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília

Id

26 April 1973

G/SG/DAA/DAM-I/04/664.11(B46)(B44)

Sir.

With reference to article XVII, paragraph 1, and article XXII of the Treaty concluded this day between the Federative Republic of Brazil and the Republic of Paraguay, I have the honour to inform you that the Ministry of Foreign Affairs of Brazil will designate a representative to set in motion together with the representative designated by the Ministry of Foreign Affairs of Paraguay for that purpose, the matters relating to the aforesaid articles,

This note and your note having the same content and date shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

IId

#### MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 6.

Sir.

With reference to article XVII, paragraph 1 and article XXII of the Treaty concluded this day between the Republic of Paraguay and the Federative Republic of Brazil, I have the honour to inform you that the Ministry of Foreign Affairs of Paraguay will designate a representative to set in motion, together with the representative designated by the Ministry for Foreign Affairs of Brazil for that purpose, the matters relating to the aforesaid articles.

This note and your note having the same content and date shall constitute an agreement between the two Governments.

Accept, Sir, etc.

RAUL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília

Ιe

26 April 1973

G/SG/DAA/DAM-I/05/241(B46)(B44)

Sir

With reference to article 12, paragraphs 1, 2 and 3, of annex A to the Treaty, concluded this day between the Federative Republic of Brazil and the Republic of Paraguay, I have the honour to inform you that the Government of Brazil agrees with the Government of Paraguay on the following:

- (a) The Director-General and the Technical and Financial Directors of the Executive Directorate of ITAIPU shall be appointed by the Government of Brasil:
- (b) The Legal, Administrative and Co-ordinating Directors shall be appointed by the Government of Paraguay;
- (c) The Deputy Directors provided for in the said article 12, paragraph 1, shall be appointed in such a manner that each shall be of nationality other than that of his Director;
- (d) This agreement on the appointment of the Directors and Deputy Directors shall apply during the first two five-year periods;
- (e) Beginning with the third period, the Directors and Deputy Directors shall be appointed in such a manner as may be agreed upon by the two Governments.
- 2. This note and your note, having the same content and date shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

He

## MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 7.

Sir,

With reference to article 12, paragraphs 1, 2 and 3 of annex A to the Treaty concluded this day between the Republic of Paraguay and the Federative Republic of Brazil, I have the honour to inform you that the Government of Paraguay agrees with the Government of Brazil on the following:

- (a) The Legal, Administrative and Co-ordinating Directors of the Executive Directorate of ITAIPU shall be appointed by the Government of Paraguay;
- (b) The Director-General and the Technical and Financial Directors shall be appointed by the Government of Brazil;
- (c) The Deputy Directors provided for in the said article 12, paragraph 1, shall be appointed in such manner that each shall be of nationality other than that of his Director;
- (d) This agreement on the appointment of the Directors and Deputy Directors shall apply during the first two five-years periods;
- (e) Beginning with the third period, the Directors and Deputy Directors shall be appointed in such a manner as may be agreed upon by the two Governments.

2. This note and your note, having the same content and date shall constitute an agreement between the two Governments.

Accept, Sir, etc.

RAÚL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília

lf

26 April 1973

G/SG/DAA/DAM-I/06/241/(B46)(B44)

Sir,

With reference to item 11 of annex B to the Treaty concluded this day between the Government of the Federative Republic of Brazil and the Government of the Republic of Paraguay, I have the honour to inform you that the understanding of the Brazilian Government concerning shipping is as follows:

- (a) The project shall include such works as may be necessary to meet the needs of river traffic, for example land and terminals connexions, locks, canals, elevators and the like. The resources for that purpose shall be assigned in a manner to be established in due course, by the High Contracting Parties;
- (b) During the construction of the hydroelectric utilization scheme, ITAIPU shall ensure, by means of terminal facilities downstream from the construction site, road transport to substitute for the previously available river transport on the stretch which is currently navigable, up to Porto Mendes.
- 2. This note and your note, having the same content and date shall constitute an agreement between the two Governments.

Accept, Sir, etc.

MÁRIO GIBSON BARBOZA

His Excellency Dr. Raúl Sapena Pastor Minister for Foreign Affairs of Paraguay

 $\Pi f$ 

#### MINISTRY FOR FOREIGN AFFAIRS

Brasília, 26 April 1973

N.R. 8.

Sir.

With reference to item 11 of annex B to the Treaty concluded this day between the Government of the Republic of Paraguay and the Government of the Federative Republic of Brazil, I have the honour to inform you that the understanding of the Government of Paraguay concerning shipping is as follows:

(a) The project shall include such works as may be necessary to meet the needs of river traffic, for example land terminals and connexions, locks, canals, elevators and the like. The resources for that purpose shall be assigned in a manner to be established in due course by the High Contracting Parties;

- (b) During the construction of the hydroelectric utilization scheme, ITAIPU shall ensure, by means of terminal facilities downstream from the construction site, road transport to substitute for the previously available river transport on the stretch which is currently navigable, up to Porto Mendes.
- 2. This note and your note having the same content and date, shall constitute an agreement between the two Governments.

Accept, Sir, etc.

RAÚL SAPENA PASTOR

His Excellency Ambassador Mário Gibson Barboza Minister for Foreign Affairs Brasília