Date December 20, 2001

among

TERMOBAHIA LTDA.

A&A ELECTRICITY INVESTMENT (JERSEY) LIMITED

ABB EQUITY VENTURES B.V.

PETRÓLEO BRASILEIRO S.A. - PETROBRÁS

FUNDAÇÃO PETROBRÁS DE SEGURIDADE SOCIAL

and

INTER-AMERICAN DEVELOPMENT BANK

Subordination Agreement



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SUBORDINATION AGREEMENT

AGREEMENT, dated December 20, 2001 (this "Agreement"), among:

- (1) TERMOBAHIA LTDA., a limited liability company organized and existing under the laws of Brazil (the "Borrower");
- (2) A&A ELECTRICITY INVESTMENT (JERSEY) LIMITED, an investment holding company incorporated as a limited company under the laws of the Channel Islands ("EIC");
- (3) ABB EQUITY VENTURES B.V., a company registered under the laws of The Netherlands ("ABB-EV");
- (4) PETRÓLEO BRASILEIRO S.A. PETROBRÁS, a mixed capital company formed under the laws of Brazil ("Petrobrás");
- (5) FUNDAÇÃO PETROBRÁS DE SEGURIDADE SOCIAL, a private pension fund organized and existing under the laws of Brazil ("Petros" and together with EIC, ABB-EV and Petrobrás, the "Subordinated Lenders"); and
- (6) INTER-AMERICAN DEVELOPMENT BANK, an international organization established by the Articles of Agreement among its member countries including the Federative Republic of Brazil ("IDB").

WHEREAS,

- A. The Borrower has been created for the purpose of developing, financing, constructing, operating and maintaining a natural gas fired, combined-cycle co-generation facility to be located in the District of Mataripe, State of Bahia, Brazil;
- B. The Borrower and IDB have entered into the Loan Agreement, dated as of the same date hereof (the "IDB Loan Agreement"), pursuant to which, on the terms and conditions contained therein, IDB has agreed to provide the Loan to the Borrower;
- C. The Borrower and ABB-EV have entered into the Amended and Restated Loan Agreement, dated as of the same date hereof (the "ABB-EV Subordinated Loan Agreement"), pursuant to which, on the terms and conditions contained therein, ABB-EV has agreed to provide Subordinated Loans to the Borrower;
- D. The Borrower and EIC have entered into the Loan Agreement, dated as of the same date hereof (the "EIC Subordinated Loan Agreement"), pursuant to which, on the terms and conditions contained therein, EIC has agreed to provide Subordinated Loans to the Borrower;



- E. The Borrower and Petrobrás have entered into the Loan Agreement, dated as of June 28, 2000 (the "Petrobrás Subordinated Loan Agreement"), pursuant to which, on the terms and conditions contained therein, Petrobrás has agreed to provide Subordinated Loans to the Borrower;
- F. Pursuant to the Petros Transfer, the Borrower will issue to Petros certain subordinated debentures (such debentures together with the ABB-EV Subordinated Loan Agreement, the EIC Subordinated Loan Agreement and the Petrobrás Subordinated Loan Agreement, the "Subordinated Loan Agreements"); and
- G. It is a condition of the initial disbursements under the IDB Loan Agreement that the parties hereto enter into this Agreement.

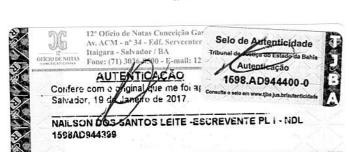
NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and in the agreements referred to above, and such other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

Section 1.1 **Definitions**. Capitalized terms used in this Agreement and not otherwise defined in this Agreement and in the Recitals shall have the meanings ascribed to them in Sections 1.1 and 1.2 of the IDB Loan Agreement. To the extent such terms are defined by reference to the Transaction Documents, for purposes hereof, such terms shall continue to have their original definitions notwithstanding any termination, expiration or amendment of such agreements, except to the extent the parties hereto agree to the contrary. In this Agreement, the following terms shall have the following meanings:

- 1.1.1 *Conversion Event* means the occurrence of an Event of Default under Section 7.2.5 of the IDB Loan Agreement with respect to the Borrower.
- 1.1.2 *Final Termination Date* means the date on which IDB is satisfied that all Obligations have been irrevocably and indefeasibly paid and discharged in full and IDB is under no obligation to make any further Disbursement under the IDB Loan Agreement.
- 1.1.3 Subordinated Debt Payment Date has the meaning set forth in Section 3.1.4 (Ranking of Obligations).
- 1.1.4 Subordinated Obligations means all indebtedness, liabilities and obligations of the Borrower to the Subordinated Lenders of whatsoever nature or kind, under the Subordinated Loan Agreements or otherwise in respect of the Shareholder Subordinated Loans.
- Section 1.2 Interpretation. In this Agreement, unless the context otherwise requires:
- 1.2.1 the rules of interpretation set out in Section 1.3 of the IDB Loan Agreement apply; and



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1.2.2 an amount shall be regarded as "indefeasibly" paid (i) to the extent paid in cleared funds and (ii) when any relevant preference and fraudulent transfer periods, and all other periods during which the payment of that amount can be set aside or avoided on the liquidation or insolvency of the payor, have expired.

ARTICLE II

REPRESENTATIONS AND WARRANTIES

Each of the Subordinated Lenders and the Borrower represents and warrants to IDB that:

- Section 2.1 Corporate Status. It (i) is duly organized and validly existing under the laws of its place or organization and (ii) has the power and authority to own its property and assets and to transact the business in which it is engaged or proposes to be engaged.
- Section 2.2 Corporate Power and Authority. (i) It has the corporate power to execute, deliver and perform its obligations under this Agreement, and has taken all necessary corporate (including, if required, equityholder) action to authorize the execution, delivery and performance by it of this Agreement and (ii) this Agreement has been duly authorized and executed by it and constitutes its legal, valid and binding obligation, enforceable in accordance with its terms, except to the extent the enforceability thereof may be limited by applicable bankruptcy, concordata, insolvency, reorganization, moratorium or other similar laws of general applicability affecting the enforcement of creditors' rights.
- Section 2.3 No Violation. Neither the execution, delivery or performance by it of this Agreement, nor compliance by it with the terms and provisions hereof, (i) will result in a breach or violation of any Authorization or Applicable Law, (ii) will conflict with or result in any breach of any of the terms, covenants, conditions or provisions of, or constitute a default under, or result in the creation or imposition of (or the obligation to create or impose) any Lien upon any of its property or assets pursuant to the terms of, any indenture, mortgage, deed of trust, credit agreement, loan agreement or any other agreement, contract or instrument to which it is a party or by which it or any of its property or assets is bound or to which it may be subject or (iii) will violate any provision of its organizational documents.
- Section 2.4 Governmental Approvals. No Authorization is required to authorize, or is required in connection with, (i) the execution, delivery and performance of this Agreement or (ii) the legality, validity, binding effect or enforceability of this Agreement.

ARTICLE III

SUBORDINATION PROVISIONS

Section 3.1 Ranking of Obligations.

3.1.1 Except as provided in Sections 3.1.2 and 3.1.3 below, until the Final Termination Date, (i) the Subordinated Lenders and the Borrower hereby agree that all



Subordinated Obligations are and shall be subordinated in right of payment and liquidation in relation to all Obligations to the extent and in the manner hereinafter set forth, (ii) no payments or other distributions whatsoever in respect of any part of the Subordinated Obligations shall be made nor shall any property or assets of the Borrower be applied to the purchase or other acquisition or retirement of any part of the Subordinated Obligations, and (iii) each of the Subordinated Lenders agrees that it will not ask, demand, sue for, take or receive from or for the account of the Borrower (whether directly or indirectly), by set-off or in any other manner, the Subordinated Obligations, or any security therefor, except with the prior written consent of IDB.

- 3.1.2 Subject to the provisions of Sections 3.1.5 and 3.1.6 and Section 3.2 (No Payment in Certain Circumstances) below, the principal of each of the Subordinated Loans from time to time outstanding shall bear interest as provided in the relevant Subordinated Loan Agreement, and the Borrower shall pay interest to the Subordinated Lenders on each Subordinated Debt Payment Date (as such term is defined in Section 3.1.4 below); provided that, the provisions of Section 3.1.5 below have been satisfied.
- 3.1.3 Subject to the provisions of Sections 3.1.5 and 3.1.6 and Section 3.2 (No Payment in Certain Circumstances) below, the principal of each of the Subordinated Loans from time to time outstanding may, at the election of the Borrower, be repaid in whole or in part in an amount determined by the Borrower on any Subordinated Debt Payment Date; provided that, the provisions of Section 3.1.5 below have been satisfied.
- 3.1.4 Subject to the provisions of Sections 3.1.5 and 3.1.6 and Section 3.2 (No Payment in Certain Circumstances) below, payments of principal and interest on each of the Subordinated Loans may be made only on Interest Payment Dates commencing on the first Interest Payment Date occurring after the Project Completion Date has occurred (each a Subordinated Debt Payment Date).
- 3.1.5 Notwithstanding the restrictions set forth in Section 3.1.1 above, but without limitation to the rights of IDB under the terms of the Security Documents, until the Final Termination Date, the Borrower may make Permitted Subordinated Loan Prepayments and repayments of principal of, other prepayments of principal of and payments of interest on, and other amounts owing in respect of, the Subordinated Obligations provided such payments are made in accordance with the provisions of the IDB Loan Agreement and the Collateral and Accounts Pledge Agreement.
- 3.1.6 Payments of the Subordinated Obligations not payable by reason of Section 3.1.5 above shall be deferred until the Subordinated Debt Payment Date on which such payment may be made in accordance with the terms hereof; provided that, in the event that the payment of the Subordinated Obligations is so deferred or the conditions to payment have not been satisfied in accordance with the terms hereof, (i) such delay in payment shall not constitute a default in respect of the Subordinated Obligations and (ii) the Subordinated Obligations shall continue to accrue interest as provided for in Section 3.1.2 above.



- Section 3.2 No Payment in Certain Circumstances. Until the Final Termination Date, and without limitation to the rights of IDB under the terms of the Security Documents:
- 3.2.1 upon any distribution or application of the assets of the Borrower in connection with any liquidation, dissolution or other proceeding for the winding up of the Borrower (whether partial or complete) or any proceeding for insolvency, bankruptcy or concordata (whether voluntary or involuntary) or any receivership, liquidation, reorganization or other similar case or proceeding in connection therewith, relative to the Borrower or to its creditors as such, or to its assets, any assignment for the benefit of creditors, reorganization, or arrangement with creditors, whether or not pursuant to the insolvency, bankruptcy, concordata or similar laws of any jurisdiction, or the sale of all or substantially all of the assets of the Borrower or any other marshalling of assets and liabilities of the Borrower,
 - 3.2.1.1 the Obligations shall first be irrevocably and indefeasibly paid in full to IDB before any of the Subordinated Lenders shall be entitled to receive any payment on account of the Subordinated Obligations or any other interests in the Borrower arising from the Subordinated Obligations whether in cash, securities or other assets; and
 - 3.2.1.2 any payment or distribution of assets of the Borrower of any kind or character in respect of the Subordinated Obligations to which any of the Subordinated Lenders would be entitled if the Subordinated Obligations were not subordinated pursuant to the terms hereof shall be made by the trustee, liquidator or agent or other Person making such payment or distribution, directly to IDB until the Obligations are irrevocably and indefeasibly paid in full and each of the Subordinated Lenders irrevocably authorizes and empowers IDB to receive and collect on its behalf any and all such payments or distributions;
- 3.2.2 without limitation to the foregoing, in the event and during the continuation of any Default, including any default in the payment when due of any Obligations, then no payment of principal, interest or other amounts owing shall be made by the Borrower on or in respect of the Subordinated Obligations, and each Subordinated Lender agrees that it will not ask, demand, sue for, take or receive from or for the account of the Borrower (whether directly or indirectly) by set-off or in any other manner, or retain payment (in whole or in part) of the Subordinated Obligations, or any security therefor, until the relevant Default shall have been cured or waived;
- if, for any reason whatsoever and whether pursuant to a bankruptcy, liquidation or similar proceeding or otherwise, the Borrower shall make or any of the Subordinated Lenders shall receive any payment or distribution of any kind or character, whether in cash, securities or other property, on account or in respect of the Subordinated Obligations in contravention of any of the terms set forth herein, such Subordinated Lender shall hold any such payment or distribution in trust for the benefit of IDB (except for the endorsement or assignment by such Subordinated Lender where necessary), promptly notify IDB of the receipt of such payment or distribution and promptly pay over or deliver such distribution or payment to IDB, or, if IDB so elects,



to any bank nominated by IDB, to hold for the account of IDB. In the event of failure of any Subordinated Lender to make any such endorsement or assignment, IDB is irrevocably authorized by the Subordinated Lenders to make the same; provided, however, that nothing in this sentence shall be deemed to restrict any rights of IDB to enforce in any manner provided under applicable law the obligation of a Subordinated Lender to make any such endorsement or assignment;

- 3.2.4 if, for any reason whatsoever and whether pursuant to a bankruptcy, liquidation or similar proceeding or otherwise, the Borrower shall make or any of the Subordinated Lenders shall receive any payment or distribution of any kind or character, whether in cash, securities or other property, on account or in respect of Shares in contravention of any of the terms of the IDB Loan Agreement or the Collateral and Accounts Pledge Agreement, such Subordinated Lender shall hold any such payment or distribution in trust for the benefit of IDB (except for the endorsement or assignment by such Subordinated Lender where necessary), promptly notify IDB of the receipt of such payment or distribution and promptly pay over or deliver such distribution or payment to IDB, or, if IDB so elects, to any bank nominated by IDB, to hold for the account of In the event of failure of any Subordinated Lender to make any such endorsement or assignment, IDB is irrevocably authorized by the Subordinated Lenders to make the same; provided, however, that nothing in this sentence shall be deemed to restrict any rights of IDB to enforce in any manner provided under applicable law the obligation of a Subordinated Lender to make any such endorsement or assignment; and
- 3.2.5 notwithstanding any provision to the contrary herein or in any other Financing Document, no payment or delivery shall be made to the Subordinated Lenders of securities or other obligations which are issued upon any merger, consolidation, sale, lease, transfer or other disposal by any corporation succeeding to the Borrower or acquiring the Borrower's property and assets, unless such securities or obligations are pledged to IDB and subordinate and junior at least to the extent provided herein to the irrevocable and indefeasible payment in full in cash of all Obligations and to the payment of any stock or obligations which are issued in exchange or substitution for any such Obligations.
- Section 3.3 Authorizations to IDB. Until the Final Termination Date, and without limitation to the rights of IDB under the terms of the Security Documents, each Subordinated Lender (i) irrevocably authorizes and empowers (without imposing any obligation on) IDB to claim, enforce, demand, sue for, collect and receive all payments and distributions on or in respect of the Subordinated Obligations which are required to be paid or delivered to IDB, as provided herein, and to file and prove all claims therefor, give receipts and take all such other action, in the name of such Subordinated Lender or otherwise, necessary or appropriate for the enforcement of this Agreement, (ii) irrevocably authorizes and empowers (without imposing any obligation on) IDB to vote the Subordinated Obligations in favor of or in opposition to any matter which may come before any meeting of creditors of the Borrower generally or in connection with, or in anticipation of, any insolvency, bankruptcy or *concordata* case or proceeding, or any proceeding under any laws relating to the relief of debtors, readjustment of indebtedness, arrangements, reorganizations,



compositions or extensions relative to the Borrower, and (iii) agrees to execute and deliver to IDB all such further instruments confirming the above authorization, and all such powers of attorney, proofs of claim, assignments of claim and other instruments, and to take all such other action, as may be necessary or as may be requested by IDB in order to enable IDB to enforce all claims upon or in respect of the Subordinated Obligations.

- Section 3.4 Non-Impairment. None of the liabilities or obligations of the Subordinated Lenders hereunder shall be impaired by IDB:
- 3.4.1 agreeing with the Borrower, any Subordinated Lender or any other Person as to any amendment, variation, assignment, novation, extension or departure (however substantial or material) of, to or from any Transaction Document (including changing the manner, place or terms of payment of or extending the time of payment of, or renewing or altering, the Loan, or otherwise amending or supplementing in any manner the Loan or any instrument evidencing the same or any agreement under which the Loan is outstanding, or any Financing Document) so that any such amendment, variation, assignment, novation or departure shall, whatever its nature, be binding upon the Subordinated Lenders in all circumstances;
- 3.4.2 releasing, granting any time, any indulgence or any waiver of any kind to, or composition with, the Borrower, any Subordinated Lender or any other Person (including, without limitation, the waiver of any preconditions for drawing under, or of any breach of, the IDB Loan Agreement or the exercise or the failure to exercise any rights against the Borrower and any other Person), or entering into any transaction or arrangements whatsoever with or in relation to the Borrower, any Subordinated Lender and/or any other Person;
- 3.4.3 taking, accepting, varying, dealing with, exchanging, renewing, enforcing, failing to enforce, take up or perfect, abstaining from enforcing, surrendering or releasing any security, right of recourse, set-off or combination or other right, remedy or interest held by IDB in connection with the Obligations or any part thereof, or acting in relation to the Transaction Documents in such manner as it thinks fit;
- 3.4.4 failing to present or observe any formality or other requirement in respect of any instrument or any failure to realise the full value of any security;
- 3.4.5 claiming, proving for, accepting or transferring any payment in respect of the Obligations in any composition by, or winding up of, the Borrower, any Subordinated Lender and/or any other Person or abstaining from so claiming, proving for, accepting or transferring; or
- 3.4.6 actually or purportedly assigning all or any portion of the Loan to any other Person.

To the fullest extent permitted by applicable law, no change of law or circumstances shall release or diminish any of the Subordinated Lender's obligations, liabilities, agreements or duties hereunder, affect this Agreement in any way, or afford the Subordinated Lenders any recourse against IDB.

Section 3.5 **Benefit of Subordination Provisions**. These subordination provisions are intended solely to define the relative rights of IDB, the Subordinated Lenders, and their respective successors and permitted assigns. Nothing contained herein shall impair, as among the Borrower and its creditors other than IDB and the Subordinated Lenders, the obligation of the Borrower to



pay the principal of and interest on and all other amounts payable in respect of the Subordinated Obligations as and when the same shall become due and payable in accordance with the terms thereof or affect the relative rights against the Borrower or the Subordinated Lenders and those of other creditors of the Borrower.

- Section 3.6. Subordination of Liens. Without limitation of any other provisions of this Agreement, any and all liens, security interests, assignments, or rights or interest in the nature of or having the commercial effect of collateral security now or hereafter securing or benefiting the Subordinated Obligations whether arising by statute, in law or equity or by contract, are hereby expressly subordinated and made secondary and inferior to the liens, security interests, assignments, rights or interests now or hereafter securing or benefiting the Obligations.
- Section 3.7 Reinstatement. If any payment to IDB by the Borrower is held to constitute a preference or a voidable transfer under applicable laws, or if for any other reason IDB is required to refund such payment to the Borrower or to pay the amount thereof to any other person, such payment to IDB shall not constitute a release of any of the Subordinated Lenders from any of its liability hereunder, and each Subordinated Lender agrees and acknowledges that this Agreement shall continue to be effective or shall be reinstated, as the case may be, to the extent of any such payment or payments.
- Section 3.8. Restrictions on Transfers. Except as provided in the Security Documents, none of the Subordinated Lenders may transfer (by sale, novation or otherwise) any of its rights or obligations under this Agreement unless (i) such transfer is in connection with a permitted transfer of all or a portion of its respective interest in the Subordinated Obligations and (ii) the transferee of such interest first agrees in writing to be bound by the terms of this Agreement applicable to the transferor of such interest and executes an instrument to that effect.

ARTICLE IV

COVENANTS; CONVERSION

- Section 4.1 Affirmative Covenants of the Subordinated Lenders. Each of the Subordinated Lenders shall:
- 4.1.1 until the Obligations have been paid in full, promptly deliver to IDB copies of each amendment or modification to any Subordinated Loan Agreement to which such Subordinated Lender is a party;
- 4.1.2 until the Obligations have been paid in full, cause to be clearly inserted in any instrument which at any time evidences any part of the Subordinated Obligations owing to such Subordinated Lender a statement to the effect that the payment thereof is subordinated in accordance with the terms of this Agreement; and
- 4.1.3 at its own cost, file all documents or instruments necessary or advisable and do all things as IDB may reasonably request in order to carry out more effectively the intent and purpose of these subordination provisions.
- Section 4.2 Negative Covenants of the Subordinated Lenders. Until the Obligations have been paid in full, each of the Subordinated Lenders shall not:



- 4.2.1 create, agree to create or permit to exist, any Lien (howsoever ranking in point of priority) of any nature whatsoever, other than pursuant to the Security Documents and such restrictions on transfer as exist by virtue of the Equity Retention and Contribution Agreement, in, over or affecting the Subordinated Obligations owing to such Subordinated Lender;
- 4.2.2 except to the extent specifically permitted under the IDB Loan Agreement, without the prior written consent of IDB (such consent not to be unreasonably withheld), agree to any amendment or modification to any Subordinated Loan Agreement to which such Subordinated Lender is a party in a manner which is adverse to the Borrower or release the Borrower from any of its obligations thereunder;
- 4.2.3 without the prior written consent of IDB, sue for payment of, or accelerate the maturity of, or initiate any proceedings to enforce any of the Subordinated Obligations owing to such Subordinated Lender;
- 4.2.4 whether by set-off, counter-claim or otherwise, reduce any amount owing by such Subordinated Lender to the Borrower by an amount payable by the Borrower to such Subordinated Lender in respect of the Subordinated Obligations;
- 4.2.5 declare all or any part of the Subordinated Obligations owing to such Subordinated Lender prematurely due and payable, take any action or commence any proceeding against the Borrower to recover all or any part of such Subordinated Obligations or initiate, support, permit or join any creditor in bringing any proceeding against the Borrower under any bankruptcy, insolvency, concordata, reorganization, receivership or similar law of any jurisdiction (to recover all or any part of the Subordinated Obligations or any other liability owed to such Subordinated Lender), except at the request of IDB;
- 4.2.6 permit to subsist or receive any guarantee or other assurance against loss in respect of all or any part of the Subordinated Obligations owing to such Subordinated Lender (other than those guarantees and/or assurances against loss that a Subordinated Lender would normally acquire in the ordinary course of business, based upon its exercise of prudent business judgment, including, but not limited to political risk insurance, currency and interest rate hedging agreements, and other similar instruments; provided that such guarantees and/or assurances do not give rise to any direct or indirect recourse against the Borrower by the providers of such guarantees and/or assurances) or accept, or otherwise take, any collateral security for such Subordinated Obligations or commence enforcement proceedings with respect to, or against, any collateral security for such Subordinated Obligations;
- 4.2.7 subordinate all or any part of the Subordinated Obligations owing to such Subordinated Lender or the proceeds thereof to any sums owing by the Borrower to any Persons other than IDB; or
- 4.2.8 take or omit to take any action whereby the subordination hereunder of all or any part of the Subordinated Obligations may be impaired.



Section 4.3 Conversion of Subordinated Loans. Upon the occurrence of a Conversion Event, each of the Subordinated Lenders and the Borrower shall, at the request of IDB, immediately cause all Subordinated Loans then outstanding to be converted into equity.

ARTICLE V

WAIVER OF SUBROGATION

Section 5.1 Waiver of Subrogation.

- Notwithstanding anything to the contrary herein or in any other Financing Document, until the Final Termination Date each of the Subordinated Lenders irrevocably waives any claim or other rights which it may now have or hereafter acquire against the Borrower that arise from the existence or performance of its obligations hereunder including any and all rights of subrogation, reimbursement, exoneration, contribution, indemnification, any right to participate in any claim or remedy of IDB against the Borrower, or any security which IDB may now have or hereafter acquire, by any payment made hereunder or otherwise, including the right to take or receive from the Borrower, directly or indirectly, in cash or other property or by set-off or in any other manner, payment or security on account of such claim or other rights.
- 5.1.2 For the purposes of such waiver of subrogation, any payments or distributions to IDB of any cash, property or securities to which the Subordinated Lenders would be entitled except for these provisions shall, as between the Borrower and the Subordinated Lenders and their respective other creditors, be deemed to be a payment by the Borrower to or on account of the Obligations.

ARTICLE VI

PROTECTIONS

Section 6.1 Exercise of Powers.

- 6.1.1 IDB shall be entitled to exercise its rights and powers under this Agreement in such a manner and at such times as IDB in its absolute discretion may determine. IDB shall not be liable for any losses arising in connection with the exercise of or failure to exercise any of its rights, powers and discretions hereunder.
- 6.1.2 The Subordinated Lenders alone shall be responsible for their contracts, engagements, acts, omissions, defaults and losses and for liabilities incurred by it.

ARTICLE VII

MISCELLANEOUS

Section 7.1 Term of this Agreement. This Agreement shall continue to be in force until the Final Termination Date.



Section 7.2 Entire Agreement; Amendment and Waiver. This Agreement and the documents referred to herein constitute the entire obligation of the parties hereto with respect to the subject matter hereof and shall supersede any prior expressions of intent or understandings with respect to this transaction. Any amendment to, or waiver by, IDB of any of the terms or conditions of, or consent given by IDB under, this Agreement (including, without limitation, this Section 7.2) or any document referred to herein shall be in writing, signed by IDB, and in the case of an amendment or waiver, also by the Subordinated Lenders and the Borrower.

Section 7.3 Notices. Any notice, request, demand or other communication to be given or made under this Agreement shall be in writing. Subject to Section 7.7 (Applicable Law and Jurisdiction) any notice, request, demand or other communication may be delivered by hand, prepaid certified airmail, by internationally recognized courier service, or facsimile to the party's address specified below or at such other address as such party shall have designated by notice to the party giving or making such notice request or other communication, and shall be effective upon receipt.

For the Borrower:

Termobahia Ltda. Rodovia Ba 523, Km 3,5 Mataripe, São Francisco do Conde Bahia, Brazil CEP 43.970-000

Atenção: President

Telephone:

011-55-71-605-8001

Facsimile:

011-55-71-605-8020

For EIC:

A & A Electricity Investment (Jersey) Limited P.O. Box 641, No. 1 Seaton Place, St. Helier Jersey JE 48YJ Channel Islands

Telephone:

44 1534 8322 25

Facsimile:

44 1534 6056 05

and with copy to:

A & A EIC Electricity Investment Company P.O. Box 8242 Binzmühlestrasse 14



8050 Zürich Switzerland Attention: CEO

c/o de Pury Pictet Turrettini

Telephone:

41 1 318 34 04

Facsimile:

41 1 318 34 11

For ABB-EV:

ABB Equity Ventures Inc. 202 Carnegie Center Suite 100 Princeton, NJ 08540

Attention: Vice President of Portfolio Management

Telephone:

609-243-7575

Facsimile:

609-243-9174

For Petrobrás:

Petróleo Brasileiro S.A. – PETROBRÁS New York Office 570 Lexington Avenue, 43rd Floor New York, NY 10022-6837 U.S.A.

and with copy to:

Petróleo Brasileiro S.A. – PETROBRÁS Av. República do Chile 65, 21º andar ABAST-REF CEP 20035-900 Rio de Janeiro, RJ Brazil

Atenção: Sr. Luis Carlos Moreira da Silva

Telephone:

21-534-3134

Facsimile:

21-534-1767



For IDB:

Inter-American Development Bank (Private Sector Department) 1300 New York Avenue, N.W. Washington D.C. 20577

Attention: Manager and Loan Administration Unit, Private Sector Department

Alternative address for communications by facsimile:

Facsimile: (202) 312-4122

Section 7.4 Rights, Remedies and Waivers.

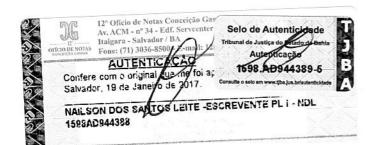
- 7.4.1 The rights and remedies of IDB in relation to any misrepresentations or breach of warranty on the part of the Subordinated Lenders under this Agreement shall not be prejudiced by any investigation by or on behalf of IDB into the affairs of any Person, by the execution or the performance of this Agreement or by any other act or thing which may be done by or on behalf of IDB in connection with this Agreement and which might, apart from this Section 7.4.1, prejudice such rights or remedies.
- 7.4.2 No course of dealing and no delay in exercising, or omission to exercise, any right, power or remedy accruing to IDB upon any default under this Agreement or any other agreement shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence therein. The rights and remedies of IDB hereunder are cumulative and not exclusive of any rights or remedies that they would otherwise have. No single or partial exercise of any such right, power or remedy shall preclude any other or further exercise thereof or the exercise of any other right, power or remedy. No action of IDB in respect of any such default, or acquiescence by it therein, shall affect or impair any right, power or remedy of IDB in respect of any other default. All waivers or consents given under this Agreement shall be in writing.
- 7.4.3 The rights and remedies provided in this Agreement and the other Transaction Documents are not exclusive of any other rights or remedies, whether provided by Applicable Law or otherwise.
- Section 7.5 Conflicts. The Subordinated Lenders and the Borrower each acknowledge and agree that, in the event of any conflict between the provisions of this Agreement and those of any other agreement or instrument evidencing or relating to any Subordinated Obligations, the provisions of this Agreement shall prevail.
- Section 7.6 English Language. To the extent that the original of any documents to be furnished or communications to be given or made under this Agreement shall be in a language other than English, it shall, if requested by IDB, be accompanied by a translation into English certified by an Authorized Representative, of the party providing such communication or of the Borrower, to be a true and correct translation of the original. If the Borrower or such party fails to provide promptly such documents or communication, IDB may, if it so requires, obtain an



English translation of any document or communication received in a language other than English at the cost and expense of the Borrower.

Section 7.7 Applicable Law and Jurisdiction.

- 7.7.1 This Agreement shall be governed by, and construed in accordance with, the law of New York.
- 7.7.2 Each of the Subordinated Lenders and the Borrower hereby irrevocably and unconditionally submits, for itself and its Property (to the extent permitted under applicable law), to the non-exclusive jurisdiction of the Supreme Court of the State of New York sitting in the Borough of Manhattan and of the United States District Court for the Southern District of New York, and any appellate court from any thereof, in any legal action, suit or proceeding arising out of or relating to this Agreement. Final judgment against any Subordinated Lender or the Borrower in any such legal action, suit or proceeding shall be conclusive and may be enforced in any other jurisdiction including Brazil, The Netherlands or the Channel Islands, as the case may be, by suit on the judgment, a certified or exemplified copy of which shall be conclusive evidence of the judgment.
- 7.7.3 Nothing in this Agreement shall affect the right of IDB to commence legal proceedings or otherwise sue any Subordinated Lender or the Borrower in Brazil, The Netherlands or the Channel Islands, as the case may be, or any other appropriate jurisdiction, or concurrently in more than one jurisdiction, or to serve process, pleadings and other legal papers upon any Subordinated Lender or the Borrower in any manner authorized by the laws of any such jurisdiction.
- 7.7.4 By the execution and delivery of this Agreement, (i) each of ABB-EV, EIC, Petros and the Borrower hereby irrevocably agrees to designate, appoint and empower CT Corporation System, with offices at 111 Eighth Avenue, 13th Floor, New York, N.Y. 10011, as its authorized agent solely to receive for and on its behalf service of summons or other legal process in any legal action, suit or proceeding in any court specified in Section 7.7.2 above and (ii) Petrobrás hereby irrevocably agrees to designate, appoint and empower Petróleo Brasileiro S.A. PETROBRÁS New York office (the "Petrobrás Process Agent") with offices at 570 Lexington Avenue, New York, New York 10022-6837, U.S.A., as its authorized agent to receive for and on its behalf service of summons or other legal process in any legal action, suit or proceeding in any court specified in Section 7.7.2 above. If for any reason such Petrobrás Process Agent shall cease to act as such, Petrobrás agrees to designate a new agent in New York City on the terms of an acknowledgement letter satisfactory to IDB.
- 7.7.5 Each of the Subordinated Lenders and the Borrower shall, for so long as it shall be bound to IDB under this Agreement, maintain a duly appointed agent to receive for an on its behalf service of summons, complaint or other legal process in any legal action,



suit or proceeding IDB may bring in New York, New York, in respect of this Agreement and shall keep IDB advised of the identity and location of such agent.

- 7.7.6 Each of the Subordinated Lenders and the Borrower further irrevocably consents, if for any reason there is no authorized agent for service of process in New York, New York, to the service of process out of the said courts by mailing copies thereof by registered United States air mail, postage prepaid, to such Subordinated Lender or the Borrower, as the case may be, at its address specified in Section 7.3 (Notices), and in such a case IDB shall also send by facsimile, or have sent by facsimile, a copy of such process to such Subordinated Lender or the Borrower, as the case may be.
- 7.7.7 Service of process in the manner provided in this Section 7.7 in any such action, suit or proceeding shall be deemed personal service and accepted by Subordinated Lenders and the Borrower as such and shall be valid and binding upon the Subordinated Lenders and the Borrower for all the purposes of any such action suit or proceeding.
- 7.7.8 In addition, each of the Subordinated Lenders and the Borrower irrevocably waives, to the fullest extent permitted by Applicable Law:
 - 7.7.8.1 any objection which it may now or hereafter have to the laying of venue of any action, suit or proceeding brought in any court referred to in Section 7.7.2 above; and
 - 7.7.8.2 any claim that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.
- 7.7.9 To the extent that any Subordinated Lender or the Borrower may, in any suit, legal action or proceeding brought in a court of Brazil, The Netherlands or the Channel Islands, as the case may be, or elsewhere arising out of or in connection with this Agreement, any of the Transaction Documents to which it is a party or the Security, be entitled to the benefit of any provision of law requiring IDB in such suit, legal action or proceeding to post security for the costs of such Subordinated Lender or the Borrower, as the case may be, or to post a bond or to take similar action, as the case may be, such Subordinated Lender or the Borrower, as the case may be, hereby irrevocably waives such benefit, in each case to the fullest extent now or hereafter permitted under the laws of Brazil, The Netherlands, the Channel Islands or, as the case may be, such other jurisdiction.
- 7.7.10 To the extent that any Subordinated Lender or the Borrower may be entitled in any jurisdiction to claim for itself or its Property immunity in respect of its obligations under this Agreement or any other Transaction Document to which it is a party from any suit, execution, attachment (whether provisional or final, in aid of execution, before judgment or otherwise) or other legal process or to the extent that in any jurisdiction that immunity (whether or not claimed) may be attributed to it or its Property, such Subordinated Lender or the Borrower, as the case may be, irrevocably



agrees not to claim and irrevocably waives such immunity to the fullest extent permitted now or in the future by the laws of such jurisdiction.

- 7.7.11 Each of the Subordinated Lenders and the Borrower hereby acknowledges that IDB shall be entitled under Applicable Law, including the provisions of the International Organizations Immunities Act of 1945 (22 U.S.C. §288) and the regulations issued thereunder, to immunity from a trial by jury in any action, suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby or any other agreement to which it is a party, brought against IDB in any court of the United TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH OF THE SUBORDINATED LENDERS AND THE BORROWER HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY TRANSACTION DOCUMENT TO WHICH SUCH PERSON IS A PARTY AND FOR ANY COUNTERCLAIM THEREIN. Each of the Subordinated Lenders and the Borrower agrees that the waivers set forth above shall have the fullest extent permitted under the Foreign Sovereign Immunities Act of 1976 of the United States (28 U.S.C. §§1602-1611) and are intended to be irrevocable and not subject to withdrawal for purposes of such Act.
- Section 7.8 Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this Agreement and any such prohibition or enforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by Applicable Law, the Subordinated Lenders and the Borrower each hereby waives any provision of law which renders any provision of this Agreement prohibited or unenforceable in any respect.
- Section 7.9 **Obligations**. IDB shall not be under any obligation in any manner to perform or fulfill any obligation of any Subordinated Lender in relation to Subordinated Obligations or to make any payment thereunder or to enforce against the Borrower any term of this Agreement or to make any enquiry as to the nature or sufficiency of any payment received by the Subordinated Lenders by virtue of this Agreement.
- Section 7.10 Rights Several. The rights of IDB under this Agreement shall be in all respects several and the failure of IDB to perform obligations under the Financing Documents shall in no way affect the rights of IDB under or in connection with this Agreement. Any amount payable to IDB under this Agreement in respect of the entitlement of IDB is a separate and independent obligation.
- Section 7.11 **Privileges and Immunities of IDB**. Nothing in this Agreement or any of the other Financing Documents shall be construed as a waiver, renunciation or other modification of any immunities, privileges or exemptions accorded to IDB under international conventions, any Applicable Law, or under its Articles of Agreement.
- Section 7.12 Successors and Assigns; Petros Accession. This Agreement shall bind and inure to the benefit of the respective successors and assigns of the parties hereto, except that subject to Section 3.8, none of the Subordinated Lenders nor the Borrower may assign or otherwise transfer



all or any part of its rights or obligations under this Agreement without the prior written consent of IDB. IDB may transfer, assign or grant its rights hereunder in connection with a transfer, assignment or grant of all or any part of its interest in the Loan. The parties hereto acknowledge and agree that, until such time as Petros shall become a party hereto pursuant to an accession agreement in form and substance satisfactory to IDB, all references herein to Petros shall be disregarded.

Section 7.13 Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

(Signature page follows)



IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Subordination Agreement to be signed in their respective names as of the day and year first above written.

TERMOBAHIA LTDA.
By: Namer Andread Sprecher Jose R. Frado Fr. Title: Precident Attorney in Fact
A&A ELECTRICITY INVESTMENT (JERSEY) LIMITED
By: Name: Dominique Candrian
Title: Director ABB EQUITY VENTURES B.V.
By:

Grego Hutchison Assistant General Counsel

12° Oficio de Notas Conceição Gaspar
Av. ACM - n° 34 - Edf. Servinter Louis Italigara - Salvador / SA
Fone: (71) 3036-857 - E-polit: 1:

AUTENTOACO

Confere com o original que me foi ar Salvador, 19 de Janeiro de 2017.

NAILSON DOS PANTOS LÉITE - ESCREVENTE PL 1 - NDL

1598AD944384

Name:

PETRÓLEO BRASILEIRO S.A. - PETROBRÁS

Name: CFZAR DE SOUZA TAVARES Title: MANACER, PROJECT FINANCE

By:

Name: Roberto Vellutini Title: Senior Advisor, Private Sector Department

WITNESS:

Title:

WITNESS:

By: Furen Cru

Name: Kazen Ceen

Title:





STATES OF NEW YORK)	
)	SS:
COUNTY OF NEW YORK)	

I, Marc Menchise, a Notary Public duly qualified, commissioned, sworn and acting in and for the jurisdiction aforesaid, do hereby certify that:

on the 20th day of December, 2001:

Before me personally came Andreas Sprecher to me known, who being by me duly sworn, did depose and say that he is the President for Termobahia Ltda., the Borrower referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said Borrower;

Before me personally came Jose R. Prado Jr., to me known, who being by me duly sworn, did depose and say that he is an Attorney in Fact for Termobahia Ltda., the Borrower referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said Borrower;

Before me personally came Gregg Hutchison to me known, who being by me duly sworn, did depose and say that he is the Assistant General Counsel for ABB Equity Ventures B.V., the party referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said party;

Before me personally came Gad Cohen to me known, who being by me duly sworn, did depose and say that he is the Vice-President Head of Global Power Group for ABB Equity Ventures B.V., the party referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said party;

Before me personally came Cezar De Souza Tavares, to me known, who being by me duly sworn, did depose and say that he is the Manager of Project Finance for Petróleo Brasileiro S.A. - PETROBRÁS, the party referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said party;

Before me personally came Dominique Candrian to me known, who being by me duly sworn, did depose and say that he is an authorized representative of A & A Electricity Investment (Jersey) Limited, the party referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of said party; and



Before me personally came Roberto Vellutini, to me known, who being by me duly sworn, did depose and say that he is the Senior Advisor of the Private Sector Department of the Inter-Ar.

CLERK

State of New York
County of New York, 355.:

NEW YORK

263544 For

I, NORMAN GOODMAN, County Clerk and Clerk of the Supreme Court of the State of New York, in and for the County of New York, a Court of Record, having by law a seal,

DO HEREBY CERTIFY pursuant to the Executive Law of the State of New York, that

Marc M Notary I No. Qualifie

Commis

instrume

whose name is subscribed to the annexed affidavit, deposition, certificate of acknowledgment or proof, was at the time of taking the same a NOTARY PUBLIC in and for the State of New York duly commissioned, sworn and autograph signature has been filed in my office; that at the time of taking such proof, acknowledgment or oath, he was duly authorized to take the same; that I am well acquainted with the handwriting of such NOTARY PUBLIC or have compared the signature on the annexed instrument with his autograph signature deposited in my office, and believe that such signature is genuine.

IN WITNESS WHEREOF Dave hereunto set my hand affixed my official seal this

FEE PAID \$3.00

County Clerk and Clerk of the Supreme Court. New York Co

CONSULADO-GERAL DO BRASIL EM NOVA YORK

Reconheço verdadeira a assinatura, no documento anexo, de NORMAN GOODMAN, Escrivão do foro do Condado de Nova York, do Estado de Nova York, Estados Unidos da América. E, para constar onde convier, mandei passar o presente, que assinei e fiz selar com o Selo-de Armas desta Repartição Consular. Dispensado o reconhecimento de firma no Brasil, a Autoridade Consular, nos termos do Decreto número 84.451, de 31.01.80.

Recebi: R\$ 20.00 (ouro) ou US\$ 20.00 Tabela 416 SELO CONSULAR

Nova York, 25 de janeiro de 2002.

Consul Adjunto

A LEGALIZAÇÃO DA ASSINATURA NÃO IMPLICA ACEITAÇÃO OU APROVAÇÃO DO DOCUMENTO. THE LEGALIZATION OF THE SIGNATURE DOES NOT IMPLY APPROVAL OR ACCEPTANCE OF THE DOCUMENT.

LD-010-PL-01/94-09/98-04



Before me personally came Roberto Vellutini, to me known, who being by me duly sworn, did depose and say that he is the Senior Advisor of the Private Sector Department of the Inter-American Development Bank, the party referred to in and which executed the attached instrument, and that he signed his name to said instrument by order of the IDB.

Marc Menchise

Notary Public, State of New York

No.

Qualified in

Commission Expires

MARIC A. MENCHISE Notary Public, State of New York
No. 01ME6007174
Qualified in Bronx County
Certificate Filed in New York County
Commission Expires 1 10v 18, 2002

