

CONFORMED COPY

LOAN NUMBER 4603-IN

Loan Agreement

(Second Powergrid System Development Project)

between

INTERNATIONAL BANK FOR RECONSTRUCTION  
AND DEVELOPMENT

and

POWERGRID CORPORATION OF INDIA LIMITED

Dated June 13, 2001

LOAN NUMBER 4603-IN

LOAN AGREEMENT

AGREEMENT, dated June 13, 2001, between INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank) and POWERGRID CORPORATION OF INDIA LIMITED (the Borrower).

WHEREAS (A) India, acting by its President (the Guarantor), and the Borrower, having been satisfied as to the feasibility and priority of the Project described in Schedule 2 to this Agreement, have requested the Bank to assist in the financing of the Project;

(B) by an agreement (the Guarantee Agreement) of even date herewith between the Guarantor and the Bank, the Guarantor has agreed to guarantee the obligations of the Borrower in respect of the Loan; and to undertake such other obligations as set forth in the Guarantee Agreement; and

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement;

NOW THEREFORE the parties hereto hereby agree as follows:

ARTICLE I

General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Loan and Guarantee Agreements for Single Currency Loans" of the Bank, dated May 30, 1995 (as amended through October 6, 1999) (the General Conditions) constitute an integral part of this Agreement:

(a) "Eastern Region" means the Eastern Region of India comprising the States

of Bihar, Jharkhand, Orissa, Sikkim and West Bengal;

(b) "Eligible Categories" means categories (1), (2), and (3), set forth in the table in Part A.1 of Schedule 1 to this Agreement;

(c) "Eligible Expenditures" means the expenditures for goods and services referred to in Section 2.02 of this Agreement;

(d) "Environmental and Social Policy and Procedures" means the environment and social policy and procedures set out in a Report dated April 1998 approved by the Borrower setting out, inter alia, the policies and procedures of carrying out environmental and social assessments of Investment Projects, preparing environmental mitigation plans, and where applicable, resettlement and rehabilitation plans and other development plans for people adversely affected as a result of the implementation thereof, carrying out consultations, processing and redressing grievances, and monitoring related impacts;

(e) "Fiscal Year" and "FY" mean the Fiscal Year of the Borrower beginning on April 1 of a calendar year and ending on March 31 of the following calendar year;

(f) "Guarantee Agreement" means the agreement between India and the Bank of even date herewith, as the same may be amended from time to time, and such term includes all schedules and agreements supplemental to the Guarantee Agreement;

(g) "Investment Program" means the Borrower's Investment Program dated April 7, 1998 setting forth its ten year investment program for the transmission sub-sector and other approved activities as such Program may be updated from time to time;

(h) "Investment Project" means an Investment Project that meets the eligibility criteria set out in Schedule 6 to this Agreement and to be carried out by the Borrower under Parts A, B and C (5) of the Project set out in Schedule 2 to this Agreement utilizing the proceeds of the Loan;

(i) "Memorandum and Articles of Association" means the Memorandum and Articles of Association of the Borrower as amended to the date of this Agreement;

(j) "North Eastern Region" means the North Eastern Region of India comprising the States of Arunchal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura;

(k) "Northern Region" means the Northern Region of India comprising the States of Delhi, Jammu and Kashmir, Haryana, Himachal Pradesh, Punjab, Rajasthan and Uttar Pradesh and Uttaranchal, and the Union Territory of Chandigarh;

(l) "Project Area" means the area comprising the Guarantor's States of Andhra Pradesh, Bihar, Chattisgarh, Goa, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttaranchal and West Bengal and such other states or Union Territories of the Guarantor as the Bank may agree;

(m) "Project Management Report" means each report prepared in accordance with Section 4.06 of this Agreement;

(n) "Security Documents" means documents to be executed, inter alia, by the Borrower for purposes of providing the Bank a pari passu interest in the liens created on its assets as security for debt existing as of the date of this Agreement in order to equally and ratably secure the payment of the principal of, and interest and other charges on, the Loan;

(o) "Southern Region" means the Southern Region of India comprising the States of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu, and the Union Territory of Pondicherry;

(p) "Special Account" means the account referred to in Part B of Schedule 1 to this Agreement; and

(q) "Western Region" means the Western Region of India comprising the States of Chattisgarh, Goa, Gujarat, Madhya Pradesh and Maharashtra, and Union Territories of Dadra and Nagar Haveli and Daman and Diu.

## ARTICLE II

## The Loan

Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Loan Agreement, an amount equal to four hundred fifty million dollars (\$450,000,000).

Section 2.02. The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Bank shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project described in Schedule 2 to this Agreement and to be financed out of the proceeds of the Loan.

Section 2.03. The Closing Date shall be June 30, 2006 or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower and the Guarantor of such later date.

Section 2.04. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one percent ( $3/4$  of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.

Section 2.05. (a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Interest Period equal to LIBOR Base Rate plus LIBOR Total Spread.

(b) For the purposes of this Section:

(i) "Interest Period" means the initial period from and including the date of this Agreement to, but excluding, the first Interest Payment Date occurring thereafter, and after the initial period, each period from and including an Interest Payment Date to, but excluding the next following Interest Payment Date.

(ii) "Interest Payment Date" means any date specified in Section 2.06 of this Agreement.

(iii) "LIBOR Base Rate" means for each Interest Period, the London interbank offered rate for six-month deposits in dollars for value the first day of such Interest Period (or, in the case of the initial Interest Period, for value the Interest Payment Date occurring on or next preceding the first day of such Interest Period), as reasonably determined by the Bank and expressed as a percentage per annum.

(iv) "LIBOR Total Spread" means for each Interest Period: (A) one half of one percent ( $1/2$  of 1%); and (B) minus (or plus) the weighted average margin, for such Interest Period, below (or above) the London interbank offered rates, or other reference rates, for six-month deposits, in respect of the Bank's outstanding borrowings or portions thereof allocated by the Bank to fund single currency loans or portions thereof made by it that include the Loan; as reasonably determined by the Bank and expressed as a percentage per annum.

(c) The Bank shall notify the Guarantor and the Borrower of LIBOR Base Rate and LIBOR Total Spread for each Interest Period, promptly upon the determination thereof.

(d) Whenever, in light of changes in market practice affecting the determination of the interest rates referred to in this Section 2.05, the Bank determines that it is in the interest of its borrowers as a whole and of the Bank to apply a basis for determining the interest rates applicable to the Loan other than as provided in said Section, the Bank may modify the basis for determining the interest rates applicable to the Loan upon not less than six (6) months' notice to the Guarantor and the Borrower of the new basis. The basis shall become effective on the expiry of the notice period unless the Guarantor or the Borrower notifies the Bank during said period of its objection thereto, in which case said modification shall not apply to the Loan.

Section 2.06. Interest and other charges shall be payable semiannually on June 15 and December 15 in each year.

Section 2.07. The Borrower shall repay the principal amount of the Loan in

accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

### ARTICLE III

#### Execution of the Project

Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end, shall carry out the Project with due diligence and efficiency and in conformity with appropriate administrative, financial, engineering, environmental and utilities practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for the Project.

(b) Without limitation upon the provisions of paragraph (a) of this Section and except as the Borrower and the Bank shall otherwise agree, the Borrower shall carry out the Project in accordance with the Implementation Program set forth in Schedule 5 to this Agreement.

(c) Without limitation upon the provisions of paragraph (a) of this Section, and except as the Bank shall otherwise agree, Investment Projects to be carried out by the Borrower under Parts A, B and C (5) of the Project shall meet the eligibility criteria set out in Schedule 6 to this Agreement.

Section 3.02. Except as the Bank shall otherwise agree, procurement of the goods, works and consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement.

Section 3.03. For the purposes of Section 9.08 of the General Conditions and without limitation thereto, the Borrower shall:

(a) prepare, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than six (6) months after the Closing Date or such later date as may be agreed for this purpose between the Borrower and the Bank, a plan for the future operation of the Project; and

(b) afford the Bank a reasonable opportunity to exchange views with the Borrower on said plan.

### ARTICLE IV

#### Financial Covenants

Section 4.01. (a) The Borrower shall maintain a financial management system, including records and accounts, and prepare financial statements in a format acceptable to the Bank, adequate to monitor and record the progress of the Project and of each Investment Project (including its costs and benefits to be derived from it) and to reflect in accordance with consistently maintained sound accounting practices the operations and financial condition of the Borrower and to register separately the operations, resources and expenditures related to the Project and each Investment Project.

(b) The Borrower shall:

(i) have its records, accounts and financial statements (balance sheets, statements of income and expenses and related statements) and the records and accounts for the Special Account for each fiscal year audited, in accordance with appropriate auditing principles, acceptable to the Bank, consistently applied, by independent auditors acceptable to the Bank;

(ii) furnish to the Bank as soon as available, but in any case not later than six months after the end of each such year: (A) certified copies of its financial statements referred to in paragraph (a) above for such year as so audited; and (B) the opinion on such statements and a report of such audit, by said auditors, of such scope and in such detail as the Bank shall have reasonably requested; and

(iii) furnish to the Bank such other information concerning such records, accounts and financial statements as well as the audit thereof, and concerning said auditors, as the Bank shall from time

to time reasonably request.

Section 4.02. The Borrower shall furnish to the Bank, for the Bank's review and comments, not later than December 31 of each year, starting with December 31, 2001, its financial projections and an updated Investment Program covering the next ten Fiscal Years, including an adequate financing plan for implementing such Investment Program.

Section 4.03. The Borrower shall take all steps necessary to maintain its accounts receivable at a level not exceeding an amount equivalent to the proceeds of its transmission and other services for the four preceding months.

Section 4.04. (a) Except as the Bank shall otherwise agree, the Borrower shall take all such measures (including, without limitation, adjustments of the structure and levels of its tariffs) as shall be required to produce, starting with the fiscal year beginning April 1, 2001 funds from internal cash generation equivalent to not less than twenty percent (20%) of the annual average of the Borrower's capital expenditures incurred or expected to be incurred during the previous, current and following fiscal year.

(b) For the purposes of this paragraph:

- (i) the term "funds from internal sources" means the difference between: (A) the sum of gross revenues from all sources related to the Borrower's operations, contributions in aid of construction, net non-operating income and any reduction in non-cash working capital; and (B) the sum of all expenses of the Borrower's operations, including maintenance and administration (excluding depreciation and other non-cash operating charges), interest and other charges on debt (excluding interest financed under a loan contract), repayment of loans (including sinking fund payments, if any), all taxes or payments in lieu of taxes, all cash dividends and other cash distributions of surplus, increase in non-cash working capital and any other cash outflows other than cash expenditures related to the operations of the Borrower;
- (ii) the term "capital expenditures" means all expenditures incurred on account of fixed or capital assets, including interest charged to construction, related to the operations of the Borrower;
- (iii) "gross revenue" means the revenue earned and received for the services provided by the Borrower;
- (iv) "expenses" means the sum of all operating expenses, taxes on income and profits, depreciation and interest charged on all debentures, bonds and loans;
- (v) "operating expenses" means the cost of operation and maintenance, service management and administrative expenses, and all taxes accruing during the financial year, other than taxes on income and profits of the Borrower;
- (vi) "taxes on income and profits" consists of income taxes and other levies accrued by the Borrower according to the provisions of any legislation or regulation applicable in this respect;
- (vii) "depreciation" means the applicable provision derived pursuant to the requirements stipulated in the Electricity (Supply) Act 1948, as amended from time to time; and
- (viii) "interest charged on all debentures, bonds and loans" means all interest, excluding interest during construction, accrued by the Borrower during the fiscal year and all other charges on debt.

Section 4.05. (a) Except as the Bank shall otherwise agree, the Borrower shall not incur any debt, if after the incurrence of such debt the ratio of debt to equity shall be greater than 4 to 1.

(b) For purposes of this Section:

- (i) The term "debt" means any indebtedness of the Borrower maturing by its terms more than one year after the date on which it is

originally incurred.

(ii) Debt shall be deemed to be incurred: (A) under a loan contract or agreement or other instrument providing for such debt or for the modification of its terms of payment, on the date, and to the extent, the amount of such debt has become outstanding pursuant to such contract, agreement or instrument; and (B) under a guarantee agreement, on the date of the agreement providing for such guarantee has been entered into but only to the extent that the guaranteed debt is outstanding.

(iii) The term "equity" means the sum of the total unimpaired paid-up capital, retained earnings and reserves of the Borrower not allocated to cover specific liabilities.

(iv) Whenever for the purposes of this Section it shall be necessary to value, in terms of the currency of the Guarantor, debt payable in another currency, such valuation shall be made on the basis of the prevailing lawful rate of exchange at which such other currency is, at the time of such valuation, obtainable for the purposes of servicing such debt, or, in the absence of such rate, on the basis of a rate of exchange acceptable to the Bank.

Section 4.06. The Borrower shall prepare, in accordance with guidelines acceptable to the Bank, and furnish to the Bank not later than 45 days after the end of each calendar quarter, a Project Management Report for such period, which:

- (a) (i) sets forth actual sources and applications of funds for the Project, both cumulatively and for the period covered by said report, and projected sources and applications of funds for the Project for the six-month period following the period covered by said report; and
- (ii) shows separately expenditures financed out of the proceeds of the Loan during the period covered by said report and expenditures proposed to be financed out of the proceeds of the Loan during the six-month period following the period covered by said report;
- (b) (i) describes physical progress in Project implementation both cumulatively and for the period covered by said report; and
- (ii) explains variances between the actual and previously forecast implementation targets; and
- (c) sets forth the status of procurement under the Project and expenditures under contracts financed out of the proceeds of the Loan, as at the end of the period covered by said report.

#### ARTICLE V

##### Management and Operations of the Borrower

Section 5.01. The Borrower shall: (a) carry on its operations and conduct its affairs in accordance with sound administrative, financial, engineering, environmental and utilities practices under the supervision of qualified and experienced management assisted by competent staff in adequate numbers;

(b) at all times operate and maintain its plants, machinery, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound engineering, financial and utility practices; and

(c) take out and maintain with responsible insurers or make other provisions satisfactory to the Bank for insurance against such risks and in such amounts as shall be consistent with appropriate practice.

#### ARTICLE VI

##### Remedies of the Bank

Section 6.01. Pursuant to Section 6.02 (p) of the General Conditions, the following additional events are specified:

(a) The Memorandum and Articles of Association of the Borrower shall have been amended, suspended, abrogated, repealed or waived so as to affect materially and adversely the financial condition or operation of the Borrower or its ability to perform any of its obligations under the Loan Agreement.

(b) Any Security Document shall have been amended, suspended, abrogated, repealed or waived without the prior approval of the Bank, or the Borrower shall have failed to enforce or implement any provision of any such Security Document.

(c) The Agreement referred to in Section 7.01 (b) of this Agreement shall have been amended, suspended, abrogated, repealed or waived without the prior approval of the Bank, or the Borrower or the Guarantor shall have failed to enforce or implement any provision of such Agreement.

Section 6.02. Pursuant to Section 7.01 (k) of the General Conditions, the following additional event is specified, namely, any event specified in paragraphs (a), (b) or (c) of Section 6.01 of this Agreement shall occur.

#### ARTICLE VII

##### Effective Date; Termination

Section 7.01. The following events are specified as additional conditions to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions:

(a) that the Security Documents shall have been executed and any necessary registrations and filings thereof shall have been made in a manner satisfactory to the Bank and without any cost to it; and

(b) that the Borrower shall have entered into a guarantee fee agreement with the Guarantor, satisfactory to the Bank, for: (i) indemnifying the Guarantor in the event that it is called upon to pay the principal of, and interest and other charges on the Loan or any portion thereof pursuant to the provisions of the Guarantee Agreement; and (ii) paying to the Guarantor on the principal amount of the Loan withdrawn and outstanding from time to time a guarantee fee satisfactory to the Bank.

Section 7.02. The following is specified as an additional matter, within the meaning of Section 12.02 (c) of the General Conditions, to be included in the opinion or opinions to be furnished to the Bank, namely, that the Security Documents have been duly authorized or ratified by, and executed and delivered on behalf of, the Borrower and are legally binding upon the Borrower in accordance with their terms and are adequate for the purpose for which they have been executed.

Section 7.03. The date ninety (90) days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

#### ARTICLE VIII

##### Representative of the Borrower; Addresses

Section 8.01. The Chairman of the Borrower or any other person designated by him in writing is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 8.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

Powergrid Corporation of India Limited  
B-9, Qutab Institutional Area  
Katwaria Saria, New Delhi 110016

Cable address:

Fax:

NATGRID  
New Delhi

91-11-6560054  
91-11-6560086

For the Bank:

International Bank for Reconstruction

and Development  
1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America

Cable address:

INTBAFRAD  
Washington, D.C.

Telex:

248423 (MCI); or  
64145 (MCI)

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

INTERNATIONAL BANK FOR RECONSTRUCTION  
AND DEVELOPMENT

By /s/ Edwin R. Lim

Country Director  
India

POWERGRID CORPORATION OF INDIA LIMITED

By /s/ R.P. Singh

Authorized Representative

SCHEDULE 1

Withdrawal of the Proceeds of the Loan

Part A: General

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

Category	Amount of the Loan Allocated (Expressed in Dollar Equivalent)	% of Expenditures to be Financed
(1) Civil works, installation and erection	90,000,000	70%
(2) Goods	355,000,000	100% of foreign expenditures, 100% of local expenditures (ex-factory cost); and 80% of local expenditures for other items procured locally
(3) Consultants' services	5,000,000	100%
TOTAL	450,000,000	

2. For the purposes of this Schedule:

(a) the term "foreign expenditures" means expenditures in the currency of any country other than that of the Guarantor for goods or services supplied from the



territory of any country other than that of the Guarantor; and

(b) the term "local expenditures" means expenditures in the currency of the Guarantor or for goods or services supplied from the territory of the Guarantor; provided, however, that if the currency of the Guarantor is also that of another country from the territory of which goods or services are supplied, expenditures in such currency for such goods or services shall be deemed to be "foreign expenditures".

3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding \$45,000,000 may be made on account of payments made for expenditures before that date but after March 1, 2000.

4. The Bank may require withdrawals from the Loan Account to be made on the basis of statement of expenditures for contracts not exceeding the equivalent of: (i) \$3,500,000 for goods and works; (ii) \$100,000 for the services of consulting firms; and (iii) \$50,000 for the services of individual consultants, under such terms and conditions as the Bank shall specify by notice to the Borrower.

#### Part B: Special Account

1. The Borrower shall open and maintain in dollars a special deposit account in the Reserve Bank of India or in any commercial bank on terms and conditions satisfactory to the Bank.

2. After the Bank has received evidence satisfactory to it that the Special Account has been opened, withdrawals from the Loan Account of amounts to be deposited into the Special Account shall be made as follows:

(a) until the Bank shall have received: (i) the first Project Management Report referred to in Section 4.06 of this Agreement; and (ii) a request from the Borrower for withdrawal on the basis of Project Management Reports, withdrawals shall be made in accordance with the provisions of Annex A to this Schedule 1; and

(b) upon receipt by the Bank of a Project Management Report pursuant to Section 4.06 of this Agreement accompanied by a request from the Borrower for withdrawal on the basis of Project Management Reports, all further withdrawals shall be made in accordance with the provisions of Annex B to this Schedule 1.

3. Payments out of the Special Account shall be made exclusively for Eligible Expenditures. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for Eligible Expenditures.

4. Notwithstanding the provisions of Part B.2 of this Schedule, the Bank shall not be required to make further deposits into the Special Account:

(a) if the Bank determines at any time that any Project Management Report does not adequately provide the information required pursuant to Section 4.06 of this Agreement;

(b) if the Bank determines at any time that all further withdrawals should be made by the Borrower directly from the Loan Account; or

(c) if the Borrower shall have failed to furnish to the Bank within the period of time specified in Section 4.01 (b) (ii) of this Agreement, any of the audit reports required to be furnished to the Bank pursuant to said Section in respect of the audit of: (A) the records and accounts for the Special Account; or (B) the records and accounts reflecting expenditures with respect to which withdrawals were made on the basis of Project Management Reports or statements of expenditures.

5. The Bank shall not be required to make further deposits into the Special Account in accordance with the provisions of Part B.2 of this Schedule if, at any time, the Bank shall have notified the Borrower of its intention to suspend in whole or in part the right of the Borrower to make withdrawals from the Loan Account pursuant to Section 6.02 of the General Conditions. Upon such notification, the Bank shall determine, in its sole discretion, whether further deposits into the Special Account may be made and what procedures should be followed for making such deposits, and shall notify the Borrower of its determination.

6. (a) If the Bank determines at any time that any payment out of the Special

Account was made for an expenditure which is not an Eligible Expenditure, or was not justified by the evidence furnished to the Bank, the Borrower shall, promptly upon notice from the Bank, provide such additional evidence as the Bank may request, or deposit into the Special Account (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment. Unless the Bank shall otherwise agree, no further deposit by the Bank into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

(b) If the Bank determines at any time that any amount outstanding in the Special Account will not be required to cover payments for Eligible Expenditures during the six-month period following such determination, the Borrower shall, promptly upon notice from the Bank, refund to the Bank such outstanding amount.

(c) The Recipient may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Account.

(d) Refunds to the Bank made pursuant to subparagraph (a), (b) or (c) of this paragraph 6 shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the provisions of the Loan Agreement.

#### Annex A to SCHEDULE 1

##### Operation of Special Account When Withdrawals Are Not Made On the Basis of Project Management Reports

1. The term "Authorized Allocation" means an amount equal to \$20,000,000 to be withdrawn from the Loan Account and deposited into the Special Account pursuant to paragraph 2 (a) of this Annex A, provided, however, that unless the Bank shall otherwise agree, the Authorized Allocation shall be limited to an amount equal to \$10,000,000 until the aggregate amount of withdrawals from the Loan Account plus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions shall be equal to or exceed the amount of \$50,000,000.

2. Withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:

(a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for deposit into the Special Account of an amount or amounts which in the aggregate do not exceed the Authorized Allocation. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested.

(b) For replenishment of the Special Account, the Borrower shall furnish to the Bank requests for deposit into the Special Account at such intervals as the Bank shall specify. Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to Part B.3 of Schedule 1 to this Agreement for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the Special Account for Eligible Expenditures. Each such deposit into the Special Account shall be withdrawn by the Bank from the Loan Account under one or more of the Eligible Categories.

3. The Bank shall not be required to make further deposits into the Special Account, once the total unwithdrawn amount of the Loan minus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions shall equal the equivalent of twice the amount of the Authorized Allocation. Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in the Special Account as of the date of such notice will be utilized in making payments for Eligible Expenditures.

#### Annex B to SCHEDULE 1

##### Operation of Special Account

When Withdrawals Are Made  
On the Basis of Project Management Reports

1. Except as the Bank may otherwise specify by notice to the Borrower, all withdrawals from the Loan Account shall be deposited by the Bank into the Special Account in accordance with the provisions of Schedule 1 to this Agreement. Each such deposit into the Special Account shall be withdrawn by the Bank from the Loan Account under one or more of the Eligible Categories.
2. Each application for withdrawal from the Loan Account for deposit into the Special Account shall be supported by a Project Management Report.
3. Upon receipt of each applications for withdrawal of an amount of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account an amount equal to the lesser of:
  - (a) the amount so requested; and
  - (b) the amount which the Bank has determined, based on the Project Management Report accompanying said applications, is required to be deposited in order to finance Eligible Expenditures during the six-month period following the date of such report; provided, however, that the amount so deposited, when added to the amount indicated by said Project Management Report to be remaining in the Special Account, shall not exceed the equivalent of \$40,000,000.

SCHEDULE 2

Description of the Project

The objectives of the Project are: (a) to assist India in restructuring the power transmission sub-sector, improve coordination in power system operations, and promote power trading through regulatory, tariff and institutional reforms; (b) to support the Borrower's institutional development and promote satisfactory financial and commercial performance and the implementation of the Borrower's investment and commercial policy; (c) to assist the Borrower in the development of modern system coordination and control facilities and reinforcement of its transmission system towards a national grid; and (d) to support the Borrower in the facilitation of private investment in the power sector and in its possible diversification into telecommunications.

The Project, which supports the implementation of the FY 1998-2003 time-slice of the Borrower's Investment Program, consists of the following Parts, subject to such modifications thereof as the Borrower and the Bank may agree upon from time to time to achieve such objectives:

Part A: Power System Coordination and Control

Improving the efficiency of power system operations in the Eastern Region and the Western Region within the Project Area through the design and implementation of regional power system coordination and control facilities.

Part B: Transmission System Development

1. The construction and operation of inter-regional transmission links for building a functional national grid consisting of:

(a) a 500 MW HVDC interconnector from the Eastern Region to the Northern Region within the Project Area with back-to-back terminal and related transmission lines (the East-North Interconnector I);

(b) a 2,000 MW HVDC interconnector from the Eastern Region to the Southern Region and related system improvements in the Southern Region, all within the Project Area (the East-South Interconnector II);

(c) a 3,000 MW HVDC interconnector from the Eastern Region to the Northern Region and related system reinforcements in the Northern Region, all within the Project Area (the East-North Interconnector II); and a 1,500 MW AC interconnector from the Eastern Region to the Western Region and related system reinforcements in the Western Region, all within the Project Area (the East-West Interconnector I).

2. Construction and operation of transmission systems within the Project Area: (a) to connect new power projects to the national grid; and (b) to reinforce regional

grids.

3. Construction and operation of transmission systems within the Project Area to facilitate international trading in electricity.

Part C: Institutional Development and Diversification into Telecommunication

1. Strengthening the Borrower's institutional development, including promoting private sector participation in the power sector through the provision of technical assistance.

2. Improving the skills of the Borrower's staff through training in the areas referred to in paragraph 1 of this Part, and in the operation and maintenance of transmission system coordination and control facilities.

3. Carrying out a review and assessment of the Borrower's proposed diversification into the telecommunications sector.

4. Based on the review referred to in paragraph 3 of this Part, preparation of business plan and Investment Projects within the Project Area on telecommunication services for inclusion in the Investment Program.

5. Implementing an Investment Project on telecommunication services.

Part D: Ongoing Activities

The completion of regional power system coordination and control facilities, transmission lines and sub-stations and, institutional development activities financed by the Bank under Loan 3237-IN for the Northern Region Transmission Project and Loan 3577-IN for the Powergrid System Development Project.

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The Project is expected to be completed by December 31, 2005.

SCHEDULE 3

Amortization Schedule

Date Payment Due	Payment of Principal (expressed in Dollars)*
December 15, 2006	9,195,000
June 15, 2007	9,485,000
December 15, 2007	9,785,000
June 15, 2008	10,095,000
December 15, 2008	10,420,000
June 15, 2009	10,750,000
December 15, 2009	11,090,000
June 15, 2010	11,440,000
December 15, 2010	11,805,000
June 15, 2011	12,180,000
December 15, 2011	12,565,000
June 15, 2012	12,965,000
December 15, 2012	13,380,000
June 15, 2013	13,800,000
December 15, 2013	14,240,000
June 15, 2014	14,695,000
December 15, 2014	15,160,000
June 15, 2015	15,640,000
December 15, 2015	16,135,000
June 15, 2016	16,650,000
December 15, 2016	17,180,000
June 15, 2017	17,725,000
December 15, 2017	18,285,000
June 15, 2018	18,865,000
December 15, 2018	19,465,000
June 15, 2019	20,085,000
December 15, 2019	20,720,000
June 15, 2020	21,380,000
December 15, 2020	22,060,000
June 15, 2021	22,760,000

TOTAL

450,000,000

\* The figures in this column represent the amount in Dollars to be repaid, except as provided in Section 4.04 (d) of the General Conditions.

SCHEDULE 4

Procurement and Consultants' Services

Section I. Procurement of Goods and Works

Part A: General

Goods and works shall be procured in accordance with the provisions of Section I of the "Guidelines for Procurement under IBRD Loans and IDA Credits", published by the Bank in January 1995, revised in January and August 1996, September 1997 and January 1999 (the Guidelines) and the following provisions of Section I of this Schedule.

Part B: International Competitive Bidding

1. Goods and works shall be procured under contracts awarded in accordance with the provisions of Section II of the Guidelines and paragraph 5 of Appendix 1 thereto.

2. The following provisions shall apply to goods and works to be procured under contracts awarded in accordance with the provisions of paragraph 1 of this Part B.

(a) Preference for Domestically Manufactured Goods and Domestic Contractors

The provisions of paragraphs 2.54 and 2.55 of the Guidelines and Appendix 2 thereto shall apply to goods manufactured in the territory of the Guarantor and works to be carried out by domestic contractors.

(b) Dispute Review Board

Each contract for works estimated to cost \$25,000,000 equivalent or more shall include the provisions for a dispute review board set forth in the standard bidding documents for works referred to in paragraph 2.12 of the Guidelines.

Part C: Review by the Bank of Procurement Decisions

1. Procurement Planning

Prior to the issuance of any invitations to prequalify for bidding or to bid for contracts, the proposed procurement plan for the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Guidelines. Procurement of all goods and works shall be undertaken in accordance with such procurement plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

2. Prior Review

With respect to each contract for works and goods estimated to cost the equivalent of \$3,500,000 or more the procedures set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines shall apply.

3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Guidelines shall apply.

Section II. Employment of Consultants

Part A: General

Consultants' services shall be procured in accordance with the provisions of the Introduction and Section IV of the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers"; published by the Bank in January 1997 and revised in September 1997 and January 1999 (the Consultant Guidelines) and the following provisions of Section II of this Schedule.

Part B: Quality- and Cost-based Selection

Except as otherwise provided in Part C of this Section, consultants' services shall be procured under contracts awarded in accordance with the provisions of Section II of the Consultant Guidelines, paragraph 3 of Appendix 1 thereto, Appendix 2 thereto, and the provisions of paragraphs 3.13 through 3.18 thereof applicable to quality- and cost-based selection of consultants.

Part C: Other Procedures for the Selection of Consultants

1. Quality-based Selection

Services under Part C of the Project shall be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 through 3.4 of the Consultant Guidelines.

2. Selection Based on Consultants' Qualifications

Services under Part C of the Project estimated to cost less than \$100,000 equivalent per contract up to an aggregate amount not to exceed the equivalent of \$500,000 may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 and 3.7 of the Consultant Guidelines.

Part D: Review by the Bank of the Selection of Consultants

1. Selection Planning

Prior to the issuance to consultants of any requests for proposals, the proposed plan for the selection of consultants under the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Consultant Guidelines. Selection of all consultants' services shall be undertaken in accordance with such selection plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

2. Prior Review

(a) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$100,000 or more, the procedures set forth in paragraphs 1, 2 (other than the third subparagraph of paragraph 2(a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(b) With respect to each contract for the employment of individual consultants estimated to cost the equivalent of \$50,000 or more, the qualifications, experience, terms of reference and terms of employment of the consultants shall be furnished to the Bank for its prior review and approval. The contract shall be awarded only after the said approval shall have been given.

3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Consultant Guidelines shall apply.

SCHEDULE 5

Implementation Program

1. With respect to each Investment Project, the Borrower shall, in accordance with procedures and methodology satisfactory to the Bank, prepare a detailed Project Implementation Plan covering matters including project design, land requirements, detailed engineering, technology used, cost estimates, construction arrangements and the eligibility criteria set out in Schedule 6 to this Agreement.

2. When presenting an Investment Project to the Bank for approval, the Borrower shall furnish to the Bank the Project Implementation Plan of the Investment Project prepared in accordance with paragraph (1) of this Schedule including a description of the financing arrangements for the Investment Project and the expenditures proposed to be financed out of the proceeds of the Loan, evidence that the Investment Project meets the eligibility criteria set forth in Schedule 6 to this Agreement, the proposed contractual and other arrangements for implementing the Investment Project, and such other information as the Bank shall reasonably request.

3. No expenditures for works, goods or services required for an Investment Project shall be eligible for financing out of the proceeds of the Loan unless the Investment Project shall have been approved by the Bank and such expenditures shall have been made not earlier than twelve months prior to the date on which the Bank shall have received the information required under paragraph 2 of this Schedule in respect of such Investment Project.

4. The Borrower shall carry out the Investment Projects approved for financing pursuant to the provision of paragraph (2) of this Schedule in accordance with:

- (i) technical specifications and standards satisfactory to the Bank;
- (ii) the objectives, policies, principles and time schedule of the environmental mitigation plan, the resettlement and rehabilitation plan, and other development plan for adversely affected people formulated pursuant to the provisions of paragraph 5 of Part I of Schedule 6 to this Agreement; and
- (iii) the Environmental and Social Policy and Procedures.

5. The Borrower shall carry out the completion of the remaining activities approved for financing under the Loans referred to in Part D of the Project in accordance with technical specifications and standards satisfactory to the Bank, and such other procedures and arrangements as the Bank shall specify, including carrying out environmental mitigation measures and resettlement and rehabilitation of affected people in accordance with the Environmental and Social Policy and Procedures.

6. The Borrower shall complete Investment Projects approved for financing by the Bank pursuant to paragraph 2 of this Schedule in a manner satisfactory to the Bank and for such purpose shall provide or procure all financing required to cover any changes in the financing plan for such Investment Project.

7. The Borrower:

(a) shall maintain an adequate organizational structure with functions, powers, staff and resources, satisfactory to the Bank, for implementing the Environmental and Social Policy and Procedures for the Project; and

(b) unless the Bank otherwise agrees, shall not waive, amend, modify, abrogate or repeal the Environmental and Social Policy Procedures or any provision thereof.

8. The Borrower shall carry on its functions as a grid operator, provider of transmission service, and facilitator of private power generation, and, except as the Bank may otherwise agree, shall not engage in power trading on its own account.

9. The Borrower shall provide to the Bank:

(a) monthly reports on collection and billing within 15 days of the end of each month beginning with the month following the month in which the Effective Date falls; and

(b) quarterly reports setting out the progress of the Project to the end of the quarter covered by the report, such report to be furnished within 30 days of the end of each quarter beginning with the quarter following the quarter in which the Effective Date falls.

10. The Borrower shall:

(a) maintain policies and procedures adequate to enable it to monitor and evaluate on an ongoing basis, in accordance with indicators acceptable to the Bank, the carrying out of the Project and the achievement of the objectives thereof;

(b) prepare, under terms of reference satisfactory to the Bank, and furnish to the Bank, by April 15, 2003, a report integrating the results of the monitoring and evaluation activities performed pursuant to paragraph (a) of this Section, on the progress achieved in the carrying out of the Project during the period preceding the date of said report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives thereof during the period following such date; and

(c) review with the Bank, by June 30, 2003, or such later date as the Bank

shall request, the report referred to in paragraph (b) of this Section, and, thereafter, take all measures required to ensure the efficient completion of the Project and the achievement of the objectives thereof, based on the conclusions and recommendations of the said report and the Bank views on the matter.

11. The Borrower shall implement, finance, operate and maintain the Investment Project under Part C.5 of the Project either by itself or through a separate entity (the Entity) in accordance with arrangements satisfactory to the Bank including: (a) transferring to the Entity the contracts relating to the implementation of such Investment Project and the assets financed thereunder, as the case may be, in a manner satisfactory to the Bank; (b) treating such transfer of the assets financed or to be financed under such contracts as a long term lease and/or a part of the Borrower's equity contribution to the Entity; and (c) requiring the Entity to implement, finance, operate and maintain, as the case may be, the Investment Project in a manner satisfactory to the Bank.

## SCHEDULE 6

### Eligibility Criteria

Except as the Bank may otherwise agree, the Borrower shall ensure that an Investment Project in respect of which the Bank approval is sought pursuant to the provisions of paragraph 2 of Schedule 5 to this Agreement meets the eligibility criteria set out in the following Parts:

Part I: General Criteria - Investment Projects Under Parts A, B and C (5) of the Project Set Out in Schedule 2 to this Agreement

1. The Investment Project is technically and operationally justified and has been formulated after taking into account other alternative investments.
2. The Investment Project is economically and financially justified in the context of the Borrower's overall least cost Investment Program and is included in such Program.
3. The appropriate governmental authorities of the Guarantor have provided all required clearances/approvals including environmental and forest clearances, as applicable, for implementing the Investment Project and this is documented in the Project Implementation Plan for such Investment Project referred to in paragraph 1 of Schedule 5 to this Agreement.
4. The Investment Project has adequate financing and procurement plans.
5. The Investment Project complies with the Environmental and Social Policy and Procedures and towards that end, the Borrower has carried out an environmental impact assessment for that Investment Project and prepared an environmental mitigation plan, and where applicable, a resettlement and rehabilitation plan or other development plan for adversely affected people, satisfactory to the Bank.

Part II: Additional Criteria - Investment Project Under Part B.1 (b) of the Project Set Out in Schedule 2 to this Agreement

The proposed Talcher power project from which power would be evacuated through the proposed East-South Interconnector II under Part B.1 (b) of the Project:

- (a) has been prepared in accordance with environmental and, resettlement and rehabilitation standards satisfactory to the Bank; and
- (b) if the power project is developed by the private sector, such power project has reached financial closure.

Part III: Additional Criteria - Investment Project Under Part B.1 (c) of the Project Set Out in Schedule 2 to this Agreement

The proposed Hirma power project from which power would be evacuated through the proposed East-North Interconnector II and the East-West Interconnector I under Part B.1 (c) of the Project:

- (a) has been prepared in accordance with environmental and, resettlement and rehabilitation standards satisfactory to the Bank; and



(b) if the power project is developed by the private sector, such power project has reached financial closure.

Part IV: Additional Criteria - Investment Projects Under Parts B.2 (a) and B.3 of the Project Set Out in Schedule 2 to this Agreement

Each proposed power project having a capacity of 500 MW or more from which power would be evacuated through the proposed transmission systems under Part B.2 (a) or B.3 of the Project:

(a) is technically and economically justified in the context of the Guarantor's overall least-cost generation expansion plan;

(b) has been prepared in accordance with environmental and, resettlement and rehabilitation standards satisfactory to the Bank; and

(c) if the power project is developed by the private sector, such power project has reached financial closure.

Part V: Additional Criteria - Investment Projects Under Parts B.3 and C.5 of the Project Set Out in Schedule 2 to this Agreement

1. Such additional criteria as may be specified by the Bank for each such Investment Project.

2. In respect of any Investment Project under Part B.3 of the Project relating to international electricity trading, such Investment Project and the associated trading arrangements have been approved by the Guarantor.

