

Public Disclosure Authorized

CONFORMED COPY

LOAN NUMBER 4890-IN

Loan Agreement

(Fourth Power System Development Project)

between

POWER GRID CORPORATION OF INDIA LIMITED

and

**INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT**

Dated March 28, 2008

LOAN NUMBER 4890-IN

LOAN AGREEMENT

AGREEMENT dated March 28, 2008, between POWER GRID CORPORATION OF INDIA LIMITED (“Borrower”) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (“Bank”). The Borrower and the Bank hereby agree as follows:

ARTICLE I – GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II – LOAN

- 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in this Agreement, the amount of six hundred million Dollars (\$600,000,000) (“Loan”), to assist in financing the project described in Schedule 1 to this Agreement (“Project”).
- 2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section IV of Schedule 2 to this Agreement.
- 2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount. The Borrower shall pay the Front-end Fee not later than sixty (60) days after the Effective Date.
- 2.04. The interest payable by the Borrower for each Interest Period shall be at a rate equal to LIBOR for the Loan Currency plus the Variable Spread. Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty (30) days, then the interest payable by the Borrower shall instead be calculated as provided in Section 3.02(d) of the General Conditions.
- 2.05. The Payment Dates are May 15 and November 15 in each year.
- 2.06. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

ARTICLE III – PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall carry out the Project in accordance with the provisions of Article V of the General Conditions.
- 3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV – REMEDIES OF THE BANK

- 4.01. The Additional Event of Suspension consists of the following, namely the Memorandum and Articles of Association shall have been amended, suspended, abrogated, repealed or waived so as to affect materially and adversely the ability of the Borrower to perform any of its obligations under this Agreement.
- 4.02. The Additional Event of Acceleration consists of the following, namely that the event specified in Section 4.01 of this Agreement occurs.

ARTICLE V – EFFECTIVENESS; TERMINATION

- 5.01. The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.

ARTICLE VI – REPRESENTATIVE; ADDRESSES

- 6.01. The Borrower’s Representative is the Chairman and Managing Director.
- 6.02. The Bank’s Address is:

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

Cable address:	Telex:	Facsimile:
INTBAFRAD Washington, D.C.	248423(MCI) or 64145(MCI)	1-202-477-6391

6.03. The Borrower's Address is:

Power Grid Corporation of India Limited
B-9, Qutab Institutional Area
Katwaria Sarai, New Delhi - 110016

Facsimile:

91-11-26560054

AGREED at New Delhi, India, as of the day and year first above written.

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By /s/ Isabel M. Guerrero
Country Director, India

POWER GRID CORPORATION OF INDIA LIMITED

By /s/ R. P. Singh
Authorized Representative

SCHEDULE 1

Project Description

The objective of the Project is to strengthen the transmission system in order to increase reliable power exchange between the regions and States of India.

The Project consists of the following schemes and activities:

Transmission System Strengthening Schemes

1. Partial construction of the East-West Transmission Corridor, specifically: (a) construction of the Ranchi - Rourkela 400 kV double circuit line, the Rourkela – Raigarh 400 kV double circuit line, and the Raigarh – Raipur 400 kV double circuit line; and (b) extension of the Ranchi, Rourkela, Raipur and Raigarh 400 kV substations.
2. Partial construction of the Western Region System Strengthening Scheme-II, specifically: (a) construction of Korba-Birsinghpur 400kV double circuit line; (b) construction of Birsinghpur-Damoh 400kV double circuit line; (c) construction of Damoh-Bhopal (MP transco) 400kV double circuit line; (d) extension of Bhopal, Gwalior, Korba, Damoh and Bina 400 kV substation and switching stations; (e) extension of 400 kV Aurangabad, Parli, and Kolhapur Sub-stations; (f) construction of 400 kV Pune and Sholapur sub-stations; (g) supply of conductors and insulators for 765 kV single circuit Bina-Gwalior line; and (h) supply and installation of Shunt Reactor at Damoh, Gwalior, Korba and Bhopal substations.
3. Partial construction of the Eastern Region System Strengthening Scheme-I, specifically: (a) construction of Durgapur-Jamshedpur 400 kV double circuit line; (b) construction of Jamshedpur-Baripada 400 kV double circuit line; (c) construction of Baripada – Mendhasal 400 kV double circuit line; and (d) extension of Jamshedpur, Durgapur, Baripada, Siliguri, Purnea and Mendhasal (Grid Corporation of Orissa or GRIDCO) 400 kV sub-stations and renovation of Siliguri and Purnea 400 kV sub-stations.
4. Completion of construction of the Balia-Bhiwadi HVDC Bipole System, specifically: (a) the HVDC Terminal for 2500 MW at Balia; (b) the HVDC Terminal for 2500 MW at Bhiwadi; and (c) supply of composite long rod insulators for +/- 500 kV HVDC Balia-Bhiwadi transmission line.
5. Completion of construction of the transmission lines in the North-West Transmission Corridor, specifically: (a) the extension of 400 kV sub-stations at Agra, Gwalior, Kankroli and Zerda (Gujarat Energy Transmission Co. Ltd.); and (b) supply of insulators for 400 kV double circuit Zerda-Kotra line.

SCHEDULE 2**Project Execution****Section I. Implementation Arrangements****A. Institutional Arrangements**

Throughout Project implementation, the Borrower shall establish and maintain an adequate organizational structure, with functions, powers, staff and resources necessary and appropriate for Project implementation, and satisfactory to the Bank, including adequate internal audit structure.

B. Anti-Corruption

1. The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.
2. Notwithstanding the requirements set forth in paragraph 1 of this Part C, the Borrower shall be exempted from the requirements set forth in paragraphs 9(d) and 10(a) of the Anti-Corruption Guidelines with respect of contracts for goods procured in accordance with Section III.A.1(b) of this Schedule 2 under the Procurement Guidelines-2004. The reference to the Procurement Guidelines-2006 in paragraph 6 of the Anti-Corruption Guidelines shall be deemed not to apply to such contracts.

C. Safeguards

Throughout Project implementation, the Borrower shall ensure that the Project is carried out in accordance with the terms and conditions, and procedures set forth in the ESPP, and shall ensure that the ESPP is revised, repealed, or not enforced only with the prior approval of the Bank.

Section II. Project Monitoring, Reporting and Evaluation**A. Project Reports**

1. The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators agreed with the Bank. Each Project Report shall cover the period of one Fiscal Year quarter, and shall be furnished to the Bank not later than forty-five (45) days after the end of the period covered by such report.

2. Notwithstanding the requirement in Section II.A.1 of this Schedule, by November 30, 2009, the Borrower shall carry out a comprehensive mid-term Project review, and shall by December 31, 2009, prepare and furnish to the Bank a mid-term Project progress report, satisfactory to the Bank.
3. For purposes of Section 5.08(c) of the General Conditions, the report on the execution of the Project and related plan required pursuant to that Section shall be furnished to the Bank not later than January 31, 2013.

B. Financial Management, Financial Reports and Audits

1. Without limitations upon the provisions of Section 5.09(a) of the General Conditions, the Borrower shall maintain a financial management system and prepare financial statements in accordance with consistently applied accounting standards and the Finance Manuals acceptable to the Bank, both in a manner adequate to reflect the operations and financial condition of the Borrower, including the operations, resources and expenditures related to the Project.
2. Without limitation upon the provisions of Part A of this Section, the Borrower shall prepare and furnish to the Bank as part of the Project Reports, not later than thirty (30) days after the end of each month, interim unaudited financial reports for the Project covering the month, in form and substance satisfactory to the Bank.
3. Without limitations upon the provisions of Section 5.09(b) of the General Conditions, the Borrower shall have its financial statements referred to above audited by independent auditors acceptable to the Bank, in accordance with consistently applied auditing standards acceptable to the Bank. Each audit of these financial statements shall cover the period of one Fiscal Year of the Borrower. The audited financial statements for each period shall be furnished to the Bank not later than six (6) months after the end of the period.

Section III. Procurement

A. General

1. **Goods.** (a) All goods required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines-2006, or in Section I of the Procurement Guidelines-2004, as the case may be, and with the provisions of this Section.
 - (b) Goods for which the bidding process commenced: (i) prior to October 15, 2006; or (ii) at the time when the relevant standard bidding documents had not been updated by the Bank to reflect the October 15, 2006

changes to the Procurement Guidelines-2004, may be procured in accordance with the Procurement Guidelines-2004. All other goods shall be procured in accordance with the Procurement Guidelines-2006.

2. **Consultants' Services.** All consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Sections I and IV of the Consultant Guidelines and with the provisions of this Section.
3. **Definitions.** The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Bank of particular contracts refer to the corresponding method described in the Procurement Guidelines-2004, the Procurement Guidelines-2006, or Consultant Guidelines, as the case may be.

B. Particular Methods of Procurement of Goods

1. **International Competitive Bidding.** Except as otherwise provided in paragraph 2 below, goods shall be procured under contracts awarded on the basis of International Competitive Bidding procedures.
2. **Other Methods of Procurement of Goods.** The following table specifies the methods of procurement, other than International Competitive Bidding, which may be used for goods. The Procurement Plan shall specify the circumstances under which such methods may be used.

Procurement Method	
(a)	National Competitive Bidding, and the additional provisions agreed between the Borrower and the Bank
(b)	Direct Contracting

C. Particular Methods of Procurement of Consultants' Services

1. **Quality- and Cost-based Selection.** Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality- and Cost-based Selection.
2. **Other Methods of Procurement of Consultants' Services.** The following table specifies the methods of procurement, other than Quality- and Cost-based Selection, which may be used for consultants' services. The Procurement Plan shall specify the circumstances under which such methods may be used.

Procurement Method

(a) Quality-based selection
(b) Selection based on Consultants' Qualifications
(c) Single-source Selection
(d) Procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants
(e) Sole Source Procedures for the Selection of Individual Consultants

D. Review by the Bank of Procurement Decisions

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's Prior Review. All other contracts shall be subject to Post Review by the Bank.

Section IV. Withdrawal of Loan Proceeds

A. General

1. The Borrower may withdraw the proceeds of the Loan in accordance with the provisions of Article II of the General Conditions, this Section, and such additional instructions as the Bank shall specify by notice to the Borrower (including the "World Bank Disbursement Guidelines for Projects" dated May 2006, as revised from time to time by the Bank and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the table in paragraph 2 below.
2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Loan ("Category"), the allocation of the amounts of the Loan to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category.

<u>Category</u>	<u>Amount of the Loan Allocated (Expressed in Dollars)</u>	<u>Percentage of Expenditures to be Financed</u>
Goods and consultants' services	600,000,000	100%
TOTAL AMOUNT	<u>600,000,000</u>	

B. Withdrawal Conditions; Withdrawal Period

1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made: (a) from the Loan Account until the Bank has received payment in full of the Front-end Fee; or (b) for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed \$120,000,000 equivalent may be made for payments made prior to this date but on or after March 1, 2007, for Eligible Expenditures.
2. The Closing Date is July 31, 2013.

Section V. Other Undertakings

1. Except as the Bank shall otherwise agree, 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 regulated services for the three (3) preceding months.
2. (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, 2008, funds from internal cash generation equivalent to not less than twenty (20) percent 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 2:
 - (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, proceeds from sales of bonds issued in lieu of outstanding receivables, 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 on depreciation used to prepare the accounts referred to in Section 4.01 of this agreement; 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.
3. (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 four (4) to one (1).
- (b) For purposes of this paragraph 3:
- (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; and

- (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.

Whenever for the purposes of this Section V 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.

SCHEDULE 3**Amortization Schedule**

Principal Payment Date	Principal Amount of the Loan Payable (Expressed in Dollars)*
November 15, 2013	13,280,000
May 15, 2014	13,635,000
November 15, 2014	14,000,000
May 15, 2015	14,375,000
November 15, 2015	14,760,000
May 15, 2016	15,155,000
November 15, 2016	15,565,000
May 15, 2017	15,980,000
November 15, 2017	16,410,000
May 15, 2018	16,850,000
November 15, 2018	17,300,000
May 15, 2019	17,765,000
November 15, 2019	18,240,000
May 15, 2020	18,730,000
November 15, 2020	19,230,000
May 15, 2021	19,745,000
November 15, 2021	20,275,000
May 15, 2022	20,815,000
November 15, 2022	21,375,000
May 15, 2023	21,950,000
November 15, 2023	22,535,000
May 15, 2024	23,140,000
November 15, 2024	23,760,000
May 15, 2025	24,395,000
November 15, 2025	25,050,000
May 15, 2026	25,720,000
November 15, 2026	26,410,000
May 15, 2027	27,120,000
November 15, 2027	27,845,000
May 15, 2028	28,590,000

* The figures in this column represent the amount Dollars to be repaid, except as provided in Section 3.08 of the General Conditions.

APPENDIX**Definitions**

1. “Anti-Corruption Guidelines” means the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”, dated October 15, 2006.
2. “Category” means a category set forth in the table in Section IV of Schedule 2 to this Agreement.
3. “Consultant Guidelines” means the “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” published by the Bank in May 2004, and revised in October 2006.
4. “ESPP” means the Environmental and Social Policy and Procedures adopted by the Borrower in April 2006, satisfactory to the Bank, setting forth, inter alia, the policies and procedures of carrying out environmental and social assessment of activities under the Project, preparing and implementing environmental assessment, mitigation and management plans, and, where applicable, resettlement and rehabilitation action plans, tribal development plans, and other development plans and entitlement frameworks for people adversely affected as a result of the implementation of the Project, carrying out consultations, processing and redressing grievances, and monitoring related impacts, as such document may be revised from time to time with the prior approval of the Bank.
5. “Finance Manuals” means the manuals approved by the Borrower in March, 2006, satisfactory to the Bank, setting forth the overall Project financial management arrangements in respect of Project flow of funds, accounting policies and procedures, chart of accounts, financial and accounting procedures, books of accounts, financial reporting, and internal controls, as the same may be revised from time to time with the prior approval of the Bank.
6. “Fiscal Year” means the Borrower’s fiscal year, beginning on April 1 of a calendar year and ending on March 31 of the following calendar year.
7. “General Conditions” means the “International Bank for Reconstruction and Development General Conditions for Loans”, dated July 1, 2005 (as amended through October 17, 2007).
8. “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.

9. “Memorandum and Articles of Association” means the Memorandum and Articles of Association of the Borrower, as amended to the date of this Agreement.
10. “POWERGRID” (or the “Borrower”) means Power Grid Corporation of India Limited, a company registered under the Guarantor’s Companies Act (1956), having its registered office at B-9 Qutub Institutional Area, Katwaria Sarai, New Delhi - 110016, India.
11. “Procurement Guidelines-2004” means the “Guidelines: Procurement under IBRD Loans and IDA Credits” published by the Bank in May 2004.
12. “Procurement Guidelines-2006” means the “Guidelines: Procurement under IBRD Loans and IDA Credits” published by the Bank in May 2004, and revised in October 2006.
13. “Procurement Plan” means the Borrower’s procurement plan for the Project, dated February 2008, and referred to in paragraph 1.16 of the Procurement Guidelines-2004, in paragraph 1.16 of the Procurement Guidelines-2006, as applicable, and paragraph 1.24 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.